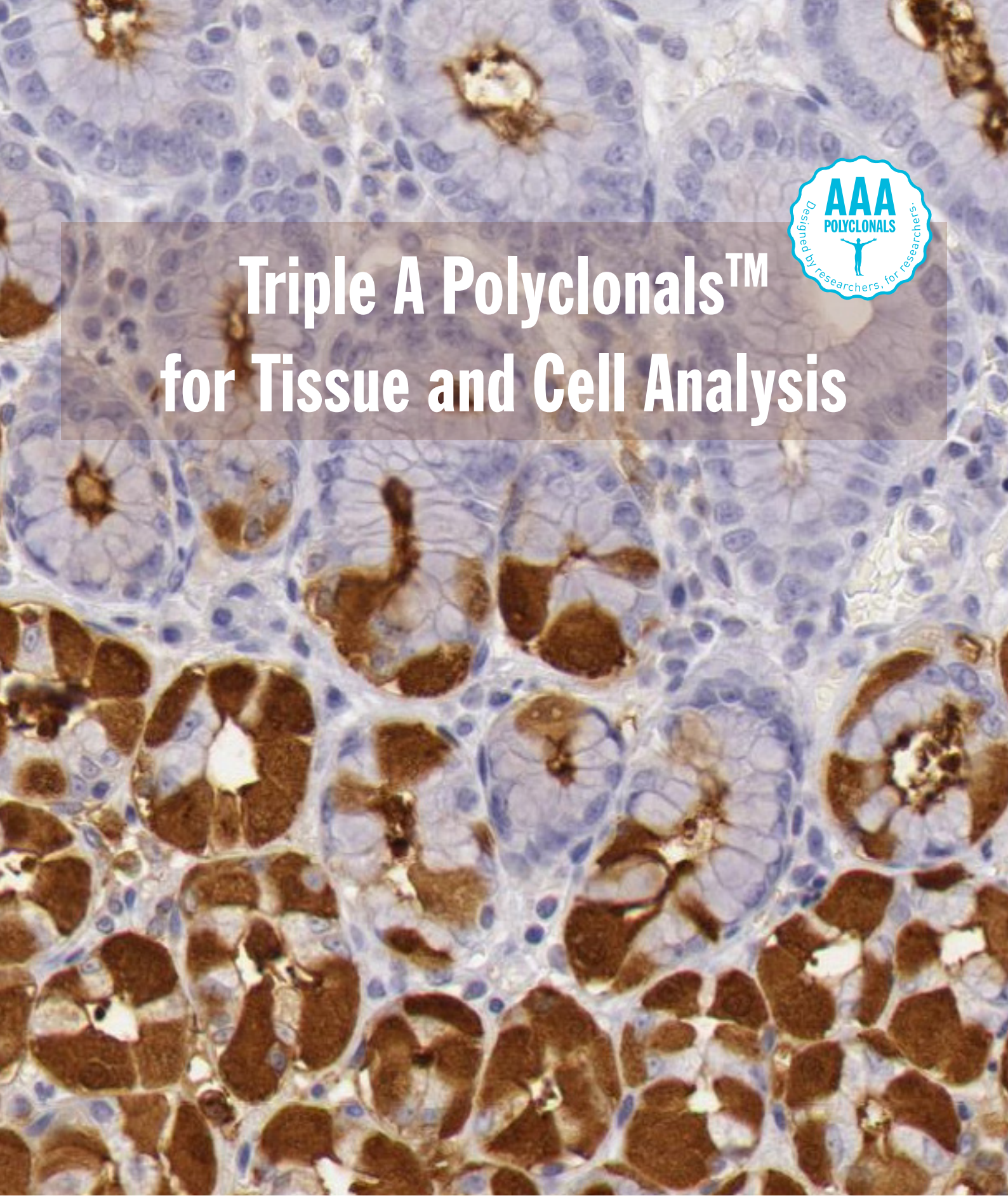


Triple A Polyclonals™ for Tissue and Cell Analysis

AAA POLYCLONALS
Designed by researchers, for researchers.

THE HUMAN PROTEIN ATLAS

ATLAS ANTIBODIES

CONTENT

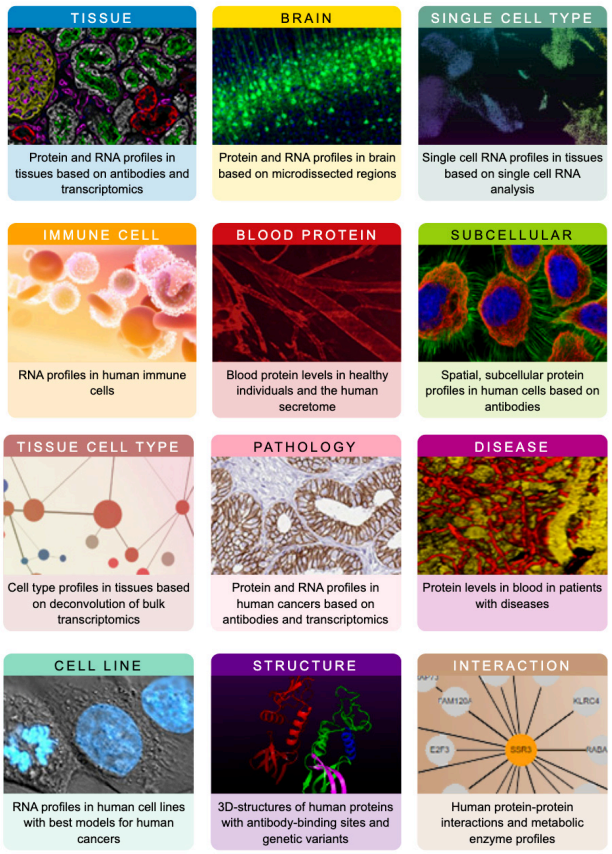
THE HUMAN PROTEIN ATLAS

MAPPING THE HUMAN PROTEOME

The Human Protein Atlas (HPA) is a Swedish-based program initiated in 2003 with the aim to map all the human proteins in cells, tissues, and organs and to understand how these proteins are expressed and interacts across different parts of the human body. This knowledge is invaluable for understanding human biology and disease mechanisms, as well as for developing targeted therapies and drugs.

As a comprehensive resource in the field of proteomics the HPA employs an integration of various -omics technologies, including antibody-based imaging, mass spectrometry-based proteomics, transcriptomics, and systems biology.

The HPA project has already contributed to several thousands of publications on human biology and diseases. Moreover, it has been selected by the organization ELIXIR (www.elixir-europe.org) as a European core resource due to its fundamental importance to the life science community worldwide.



The HPA consists of 12 sections each focusing on a particular aspect of the genome-wide analysis of the human proteins. The proteome analysis is based on 27173 antibodies targeting 17268 unique proteins.

12 WAYS TO EXPLORE THE HUMAN PROTEOME

Tissue section: the distribution of the proteins across all major tissues and organs in the human body.

Brain section: the distribution of proteins in various regions of the mammalian brain.

Single Cell Type section: the expression of protein-coding genes in single human cell types based on scRNA-seq.

Tissue Cell Type section: the expression of protein-coding genes in human cell types based on bulk RNAseq data.

Pathology section: the impact of protein levels for the survival of patients with cancer.

Disease Blood Atlas section: protein levels in blood in patients with different diseases and protein panels used for disease prediction.

Immune Cell section: the expression of protein-coding genes in immune cell types.

Blood Protein section: the proteins detected in blood and proteins secreted by human tissues.

Subcellular section: the subcellular localization of proteins in single cells

Cell Line section: the expression of protein-coding genes in human cell lines.

Structure section: the experimental and predicted 3D structures of proteins including antigen sites and population- and clinical variants.

Interaction section: the expression and features of protein-coding genes in the context of protein-protein and metabolic interaction networks.

The Human Protein Atlas continues to be a vital resource for researchers, offering insights into the complex world of human proteins and their roles in health and disease.

Learn more at proteinatlas.org.

ATLAS ANTIBODIES

ATLAS ANTIBODIES & THE HUMAN PROTEIN ATLAS

Atlas Antibodies is a Swedish Biotech company that specializes in producing highly specific and application-specific validated antibodies for research purposes.

Atlas Antibodies is the original manufacturer of Triple A Polyclonals™ which are human anti rabbit polyclonals developed within the Human Protein Atlas project. The antibodies are validated on all major tissues and organs in the human body.

TRIPLE A POLYCLONALS BY ATLAS ANTIBODIES

One of the key components of the Human Protein Atlas project is the use of primary polyclonal antibodies for identifying and locating the proteins of interest.

The Triple-A Polyclonals™ from Atlas Antibodies are particularly noteworthy for their high specificity, affinity, consistency, and lot-to-lot reproducibility. Triple-A polyclonals are rigorously validated to ensure that they bind only to the target proteins, minimizing the risk of false-positive results and providing accurate data for researchers.

Triple A polyclonals play a crucial role in the context of the Human Protein Atlas project in several aspects:

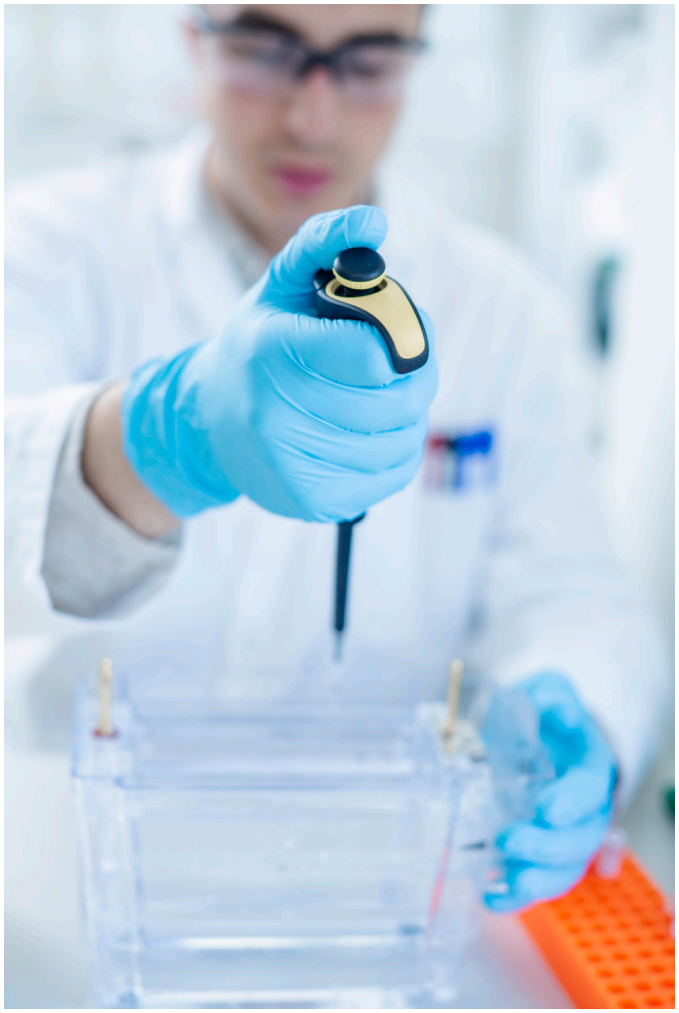
High Specificity: Triple-A Polyclonals are designed to have high specificity, ensuring that they recognize only the intended target proteins. This specificity is essential for accurately identifying the presence of specific proteins in different tissues and cells.

Reliable Data: consistent results are essential in scientific research, allowing scientists to draw meaningful conclusions from their experiments. By using highly validated antibodies with high specificity and consistency, such as Triple A Polyclonals, researchers generate reliable and reproducible data.

Validated in Multiple Applications: Triple-A Polyclonals are employed for tissue and cell analysis in immunohistochemistry (IHC), immunofluorescence cytochemistry (ICC-IF) and western blot (WB).

Data Accessibility: data obtained using Triple-A Polyclonals is contributing to the vast database of the Human Protein Atlas. This data is openly accessible to the scientific community, providing valuable information for researchers worldwide.

Learn more about Triple A Polyclonals



AAA POLYCLONALS
Designed by researchers, for researchers.

Triple A Polyclonals™ (Atlas Antibodies Advanced Polyclonals) are research-grade rabbit polyclonals developed within the Human Protein Atlas project.

The accurate and reliable data generated using Triple A Polyclonals have paved the way for discoveries in various fields, including biology, medicine, and drug development.

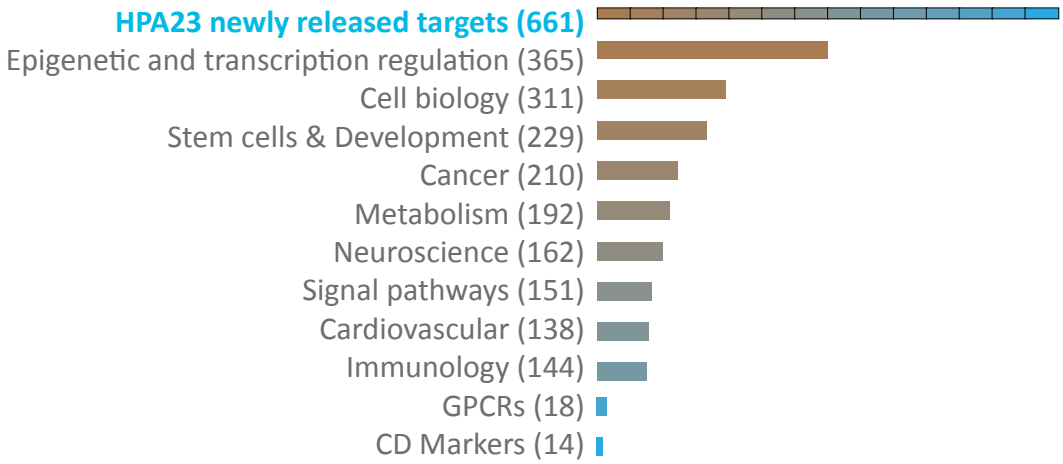
By utilizing Triple A Polyclonal antibodies, the Human Protein Atlas project is significantly advancing our understanding of human proteomics.

NEW VERSION OF THE HUMAN PROTEIN ATLAS & NEWLY RELEASED TRIPLE A POLYCLONALS

The Human Protein Atlas releases a new version of its resource each year with expanded data.

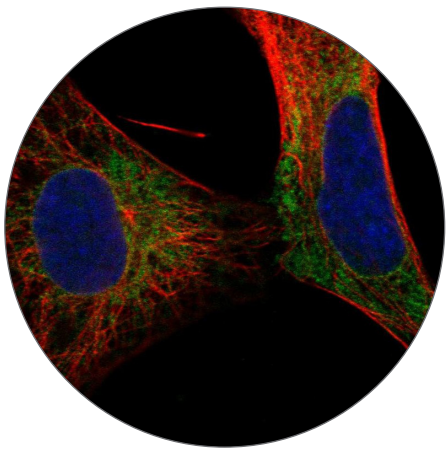
This year's version (HPA23) contains 742 proteins mapped to specific cell types and cell states, 200 micro-dissected brain regions, and information on 1,206 cell lines. All five million webpages on the Human Protein Atlas portal reflect the most recent consensus genome with over 20,000 protein coding genes.

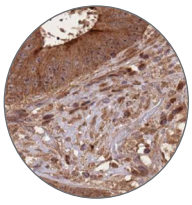
Newly released Triple A Polyclonals (HPA version 23) indexed by research area and validated applications.

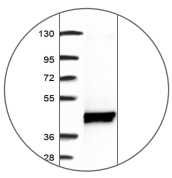


"We are excited to launch this new version of the open access Human Protein Atlas with an updated genome assembly and a new section for protein-protein interactions. We are confident that this will add valuable information for researchers interested in human biology and disease.

Prof. Mathias Uhlén, Director of the Human Protein Atlas consortium.







542 validated in ICC-IF | **121** validated in IHC | **111** validated in WB

SELECTED TRIPLE A POLYCLONALS INDEXED BY TARGET (A-Z)

The products listed below are a selection of the Triple A Polyclonals released in HPA version 23.

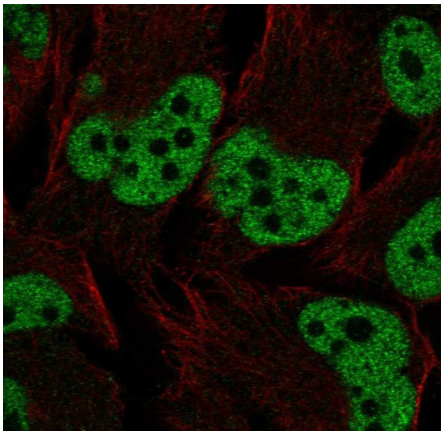
Download the full list here

Product Name	Product ID	Research Area / Biological Role	Application	Interspecies Homology
Anti-ADGRA2	HPA008984	**GPCRs: Key regulator of cerebrovascular development in vertebrates**	ICC-IF	Mouse 89% - Rat 89%
Anti-CCKBR	HPA079548	**GPCRs: Receptor for gastrin & cholecystokinin**	ICC-IF	Mouse 96% - Rat 95%
Anti-CCR2	HPA063255	**GPCRs: Receptor-mediating monocyte chemotaxis**	ICC-IF	Mouse 28% - Rat 30%
Anti-CD1E	HPA070634	**Immunology: T-cell glycoprotein required for the presentation of glycolipid antigens on cell surface**	ICC-IF	Mouse 42% - Rat 39%
Anti-CD22	HPA066523	**Immunology: B Cells activation & regulation of B-cells receptor signalling**	IHC	Mouse 56% - Rat 57%
Anti-CITED2	HPA069092	**Stem Cells & Dev: Transcription factor required for normal embryogenesis**	WB, ICC-IF	Mouse 89% - Rat 89%
Anti-DEFB121	HPA079460	**Immunology: Antimicrobial peptide**	IHC	Mouse 35% - Rat 35%
Anti-DLG4	HPA071006	**Neuroscience: Synaptogenesis & synaptic plasticity**	IHC, WB	Mouse 100% - Rat 100%
Anti-DRD4	HPA062682	**Neuroscience: Synaptic neurotransmitter receptor responsible for neuronal signaling**	ICC-IF	Mouse 90% - Rat 80%
Anti-ERBB3	HPA070524	**Cancer: Pathogenesis & Therapy**	IHC, WB	Mouse 90% - Rat 89%
Anti-ESR2	HPA068406	**Cancer: Development & Progression**	WB, ICC-IF	Mouse 81% - Rat 79%
Anti-FOXP3	HPA069372	**Immunology: Transcriptional regulator crucial for development & inhibition of reg T-cells**	ICC-IF	Mouse 90% - Rat 88%
Anti-GPR148	HPA046655	**GPCRs: Sensory perception of smell**	ICC-IF	Mouse 39% - Rat 39%
Anti-GPR174	HPA058306	**GPCRs: Putative receptor for purines coupled to G-proteins**	ICC-IF	Mouse 77% - Rat 73%
Anti-HDAC10	HPA019662	**Cancer: Mechanisms & Therapy**	WB, ICC-IF	Mouse 64% - Rat 51%
Anti-HLA-DOA	HPA076922	**Immunology: Modulator in the HLA class II restricted antigen presentation pathway**	IHC	Mouse 86% - Rat 88%
Anti-HTT	HPA051524	**Neuroscience: Regulates neuronal & glial functions in Huntington's disease**	IHC	Mouse 80% - Rat 82%
Anti-ILF2	HPA072048	**Cell Biology: Transcription factor important for innate immunity**	WB, ICC-IF	Mouse 100% - Rat 100%
Anti-IRX3	HPA066576	**Stem Cells & Dev: Early neural development**	ICC-IF	Mouse 84% - Rat 82%
Anti-KCNG4	HPA063516	**Neuroscience: Regulation of neurotransmitter release**	ICC-IF	Mouse 57% - Rat 57%
Anti-KCTD15	HPA042522	**Stem Cells & Dev: Neural crest formation**	ICC-IF	Mouse 93% - Rat 93%
Anti-NLRP5	HPA047260	**Stem Cells & Dev: Early embryonal development**	ICC-IF	Mouse 52% - Rat 50%
Anti-RPS23	HPA071639	**Cell Biology: Ribosomal protein & translation accuracy**	WB, ICC-IF	Mouse 100% - Rat 100%
Anti-SERPINB2	HPA076596	**Cancer: Pathogenesis & Therapy**	IHC, WB	Mouse 82% - Rat 77%
Anti-SLC17A8	HPA038870	**Neuroscience: Vesicular glutamate transporter mediates the presynaptic uptake of L-glutamate**	ICC-IF	Mouse 90% - Rat 84%
Anti-ST14	HPA056258	**Cancer: Breast Cancer**	IHC	Mouse 82% - Rat 82%
Anti-STAU2	HPA075293	**Cell Biology: Microtubule-dependent transport & cell plasticity**	IHC, WB	Mouse 88% - Rat 26%
Anti-SYP	HPA079659	**Neuroscience: Synaptic plasticity regulates vesicle retrieval during and after stimulation**	IHC	Mouse 92% - Rat 94%
Anti-TAGLN	HPA061657	**Cancer: Colorectal, Ovarian & Lung Cancers**	IHC, WB	Mouse 90% - Rat 97%
Anti-TBX10	HPA076197	**Stem Cells & Dev: Early embryonic cell fate & organogenesis**	ICC-IF	Mouse 78% - Rat 49%
Anti-TP53RK	HPA075054	**Cell Biology: Regulation of mitosis**	IHC, WB	Mouse 89% - Rat 90%
Anti-UHMK1	HPA077624	**Cell Biology: Cell cycle progression**	WB, ICC-IF	Mouse 99% - Rat 99%

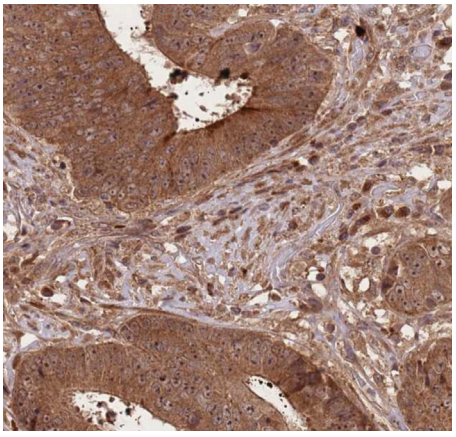
SELECTED TRIPLE A POLYCLONALS BY RESEARCH AREA

CANCER

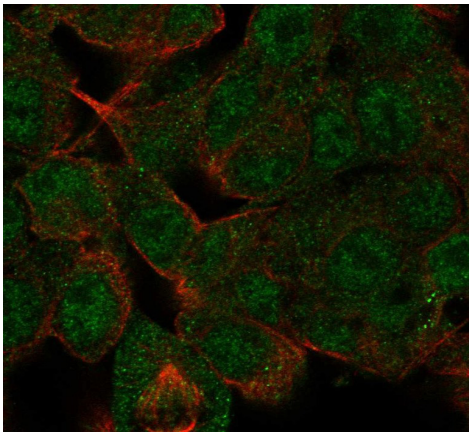
Triple A polyclonal antibodies serve as crucial tools for identifying cancer biomarkers. They are indispensable in cancer research due to their ability to recognize multiple epitopes on a target protein, ensuring high specificity and sensitivity in detecting cancer-related biomarkers. Their diverse binding sites make them valuable tools for identifying various protein isoforms specific to cancer cells, aiding in precise disease diagnosis and prognosis. Additionally, polyclonal antibodies offer robustness and versatility, allowing you to explore the heterogeneity of cancer tissues, leading to a deeper understanding of tumor biology and the development of targeted therapies for different cancer subtypes.



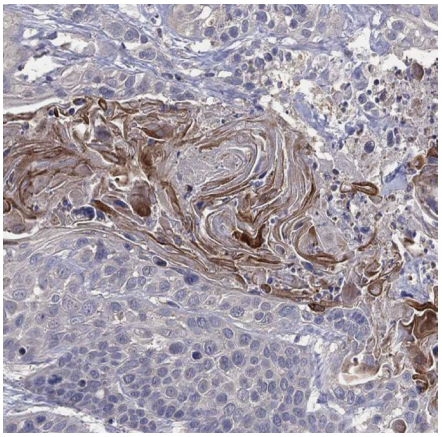
Anti-ESR2 (Cat. HPA068406)
Estrogen Receptor 2
ICC-IF staining of human **melanoma cell line SK-MEL-30** showing clear localization to nucleoplasm (green).



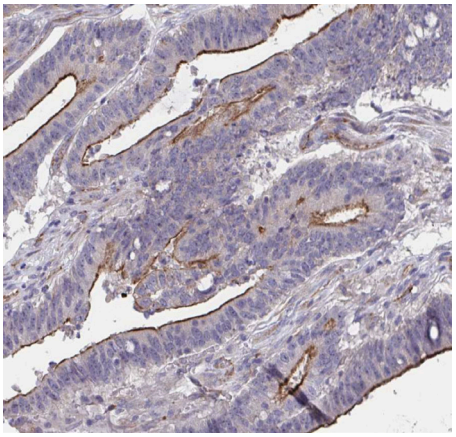
Anti-ERBB3 (Cat. HPA070524)
Erb-B2 Receptor Tyrosine Kinase 3
IHC staining of human **colorectal cancer** (adenocarcinoma) showing strong cytoplasmic and membranous staining (brown).



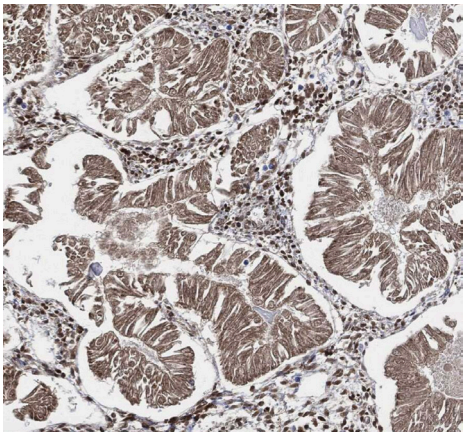
Anti-HDAC10 (Cat. HPA019662)
Histone Deacetylase 10
ICC-IF staining of human **hepatocellular carcinoma** cell line Hep-G2 showing localization to nucleoplasm and cytosol.



Anti-SERPINB2 (Cat. HPA076596)
Serpin Family B Member 2
IHC staining of human **head and neck cancer** (squamous cell carcinoma) showing strong cytoplasmic and membranous staining (brown).



Anti-ST14 (Cat. HPA056258)
ST14 Transmembrane Serine Protease Matriptase
IHC staining of human **colorectal cancer** (adenocarcinoma) showing strong cytoplasmic and membranous staining (brown).

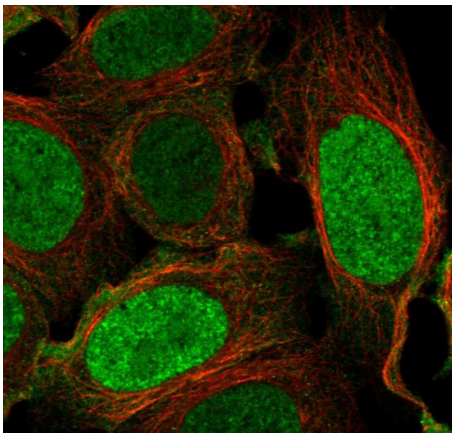


Anti-TAGLN (Cat. HPA061657)
Transgelin
IHC staining of human **endometrial cancer** (adenocarcinoma) showing moderate cytoplasmic and membranous staining (brown).

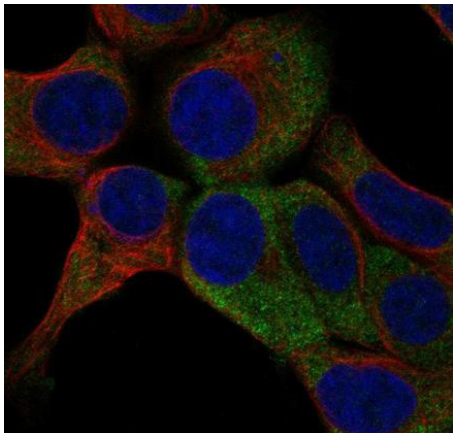
SELECTED TRIPLE A POLYCLONALS BY RESEARCH AREA

CELL BIOLOGY

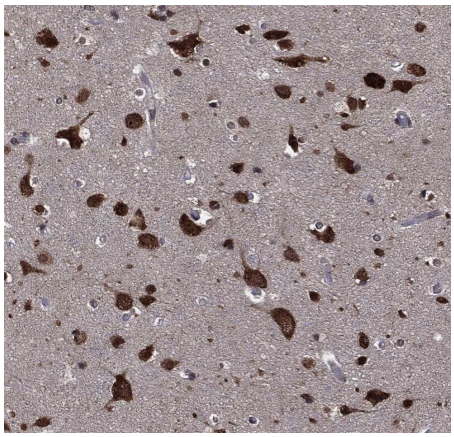
Triple A polyclonal antibodies play a pivotal role in cell biology research by allowing you to identify and study specific proteins within cells. By binding to unique epitopes on target proteins, these antibodies enable the precise localization and visualization of each organelle and cellular structures, facilitating detailed investigations into cellular processes. This specificity is essential for techniques like immunofluorescence, providing you with invaluable insights into cell behavior, interactions, and signaling pathways.



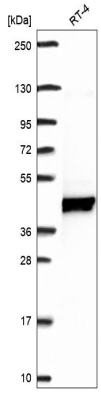
Anti-ILF2 (Cat. HPA072048)
Interleukin Enhancer Binding Factor 2
ICC-IF staining of **human cell line HAP1** (myelogenous leukemia) showing localization to nucleoplasm & cytosol (green).

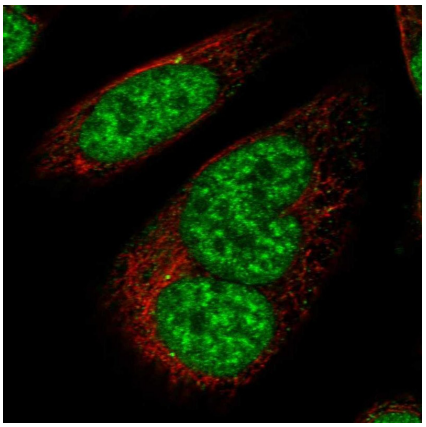


Anti-RPS23 (Cat. HPA071639)
ribosomal protein S23
ICC-IF staining of **human cell line HAP1** (myelogenous leukemia) showing localization to cytosol (green).

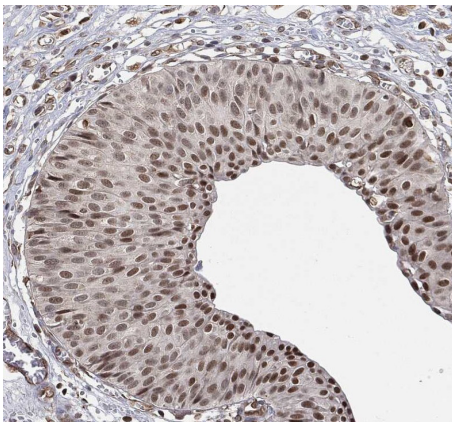


Anti-STAU2 (Cat. HPA075293)
Staufen Double-Stranded RNA Binding Protein 2
IHC staining of **human cerebral cortex** showing strong cytoplasmic and nuclear positivity in neuronal and glial cells (brown).





HPA077624 - Anti-UHMK1
U2AF homology motif kinase 1
Left: Western blot analysis in **human cell line RT-4** (bladder cancer).
Right: ICC-IF staining of **human cell line SiHa** (squamous cell carcinoma) showing localization to nucleoplasm & nuclear speckles (green).

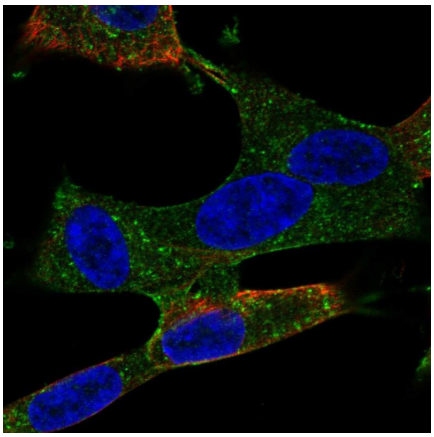


Anti-TP53RK (Cat. HPA075054)
TP53 regulating kinase
IHC staining of **human urinary bladder** showing nuclear positivity in urothelial cells (brown).

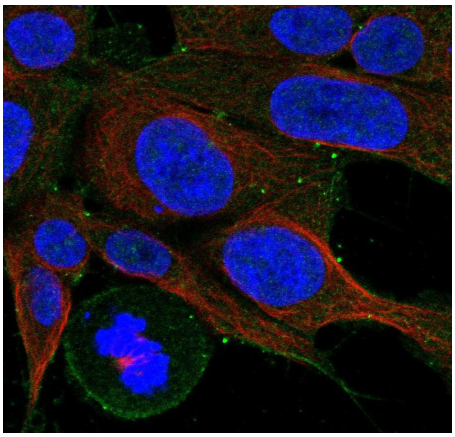
SELECTED TRIPLE A POLYCLONALS BY RESEARCH AREA

GPCRS

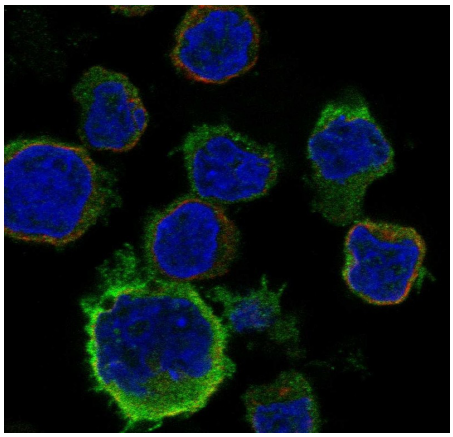
Triple A polyclonal antibodies play a crucial role in G protein-coupled receptors (GPCRs) research by enabling the identification and characterization of these integral membrane proteins. Through the use of specific primary antibodies, you can detect and study GPCRs in various tissues and cell types, shedding light on their diverse functions and signaling pathways. Triple A polyclonal antibodies also aid in understanding the intricate roles GPCRs play in physiological processes and diseases, allowing for the development of targeted therapies and drugs that modulate GPCRs activity.



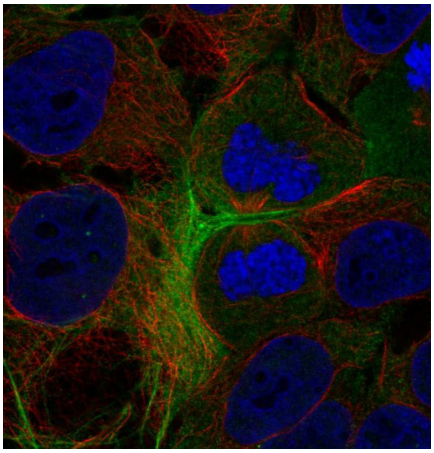
Anti-ADGRA2 (Cat. HPA008984)
Adhesion G-Protein-Coupled Rec A2
ICC-IF staining of **human cell line SH-SY5Y** (neuroblastoma) showing localization to plasma membrane and vesicles (grreen).



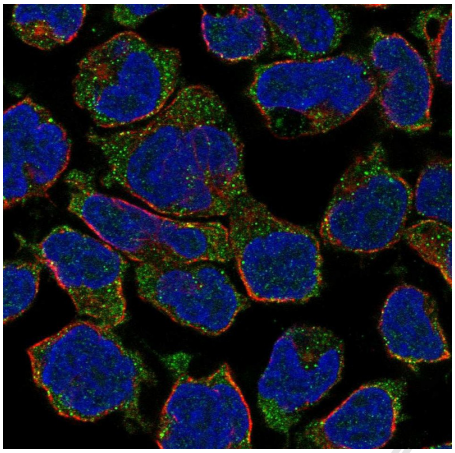
Anti-CCKBR (Cat. HPA079548)
Cholecystokinin B Receptor
ICC-IF staining of **human cell line HAP1** (chronic myeloid leukemia) showing localization to plasma membrane (green).



Anti-CCR2 (Cat. HPA063255)
C-C Motif Chemokine Receptor 2
ICC-IF staining of **human cell line THP-1** (leukemia monocytic) showing localization to plasma membrane (green).



Anti-GPR148 (Cat. HPA046655)
G Protein-Coupled Receptor 148
ICC-IF staining of **human cell line CACO-2** (colorectal adenocarcinoma) showing localization to plasma membrane (green).

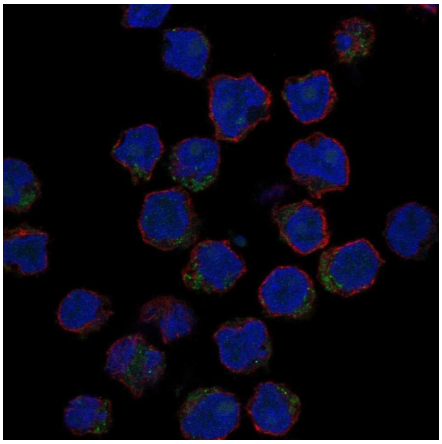


Anti-GPR174 (Cat. HPA058306)
G Protein-Coupled Receptor 174
ICC-IF staining of **human cell line JURKAT** (immortalized T lymphocyte) showing localization to plasma membrane and vesicles.

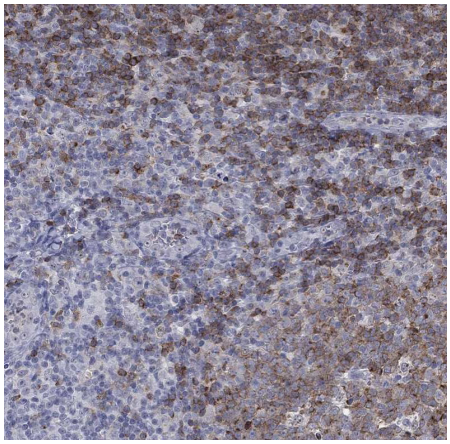
SELECTED TRIPLE A POLYCLONALS BY RESEARCH AREA

IMMUNOLOGY

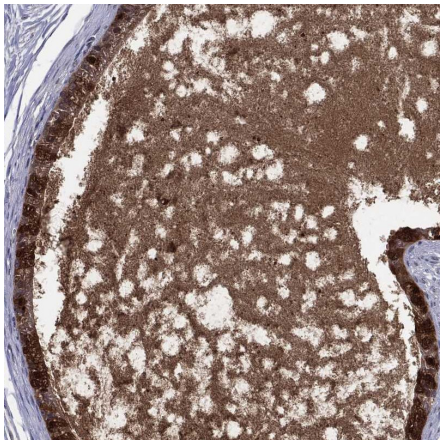
In immunology research, primary antibodies serve as essential tools for detecting and studying specific antigens, such as proteins, peptides, or pathogens, within the immune system. Triple A polyclonal antibodies allow you to identify immune cells and cytokines, enabling a detailed analysis of immune responses in various contexts, including infection, autoimmune diseases, and cancer. By providing precise recognition of target molecules, Triple A polyclonals contribute significantly to advancing our understanding of immunological mechanisms, aiding in the development of vaccines, immunotherapies, and treatments for immune-related disorders.



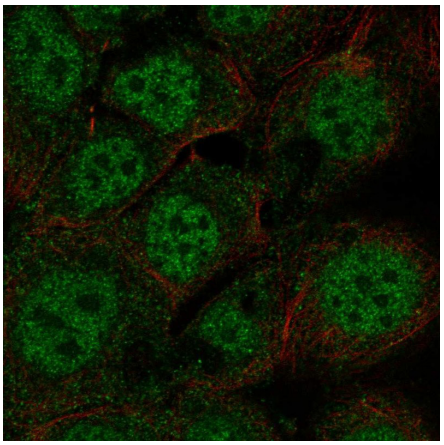
Anti-CD1E (Cat. HPA070634)
CD1e Molecule
ICC-IF staining of **human cell line REH** (acute lymphocytic leukemia) showing localization to nucleoli and the Golgi apparatus (green).



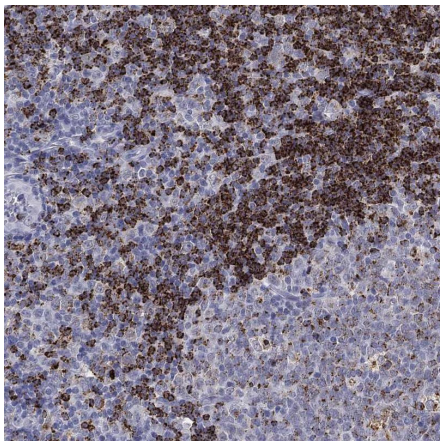
Anti-CD22 (Cat. HPA066523)
CD22 molecule
ICC-IF staining of **human tonsil** showing moderate to strong cytoplasmic positivity in germinal center cells and non-germinal center cells (brown).



Anti-DEFB121 (Cat. HPA079460)
Defensin Beta 121
IHC staining of **human epididymis** showing strong cytoplasmic and secreted positivity in glandular cells.



Anti-FOXP3 (HPA069372)
Forkhead box P3
ICC-IF staining of **human cell line MCF-7** (breast cancer) showing localization to nucleoplasm and cytosol (green).

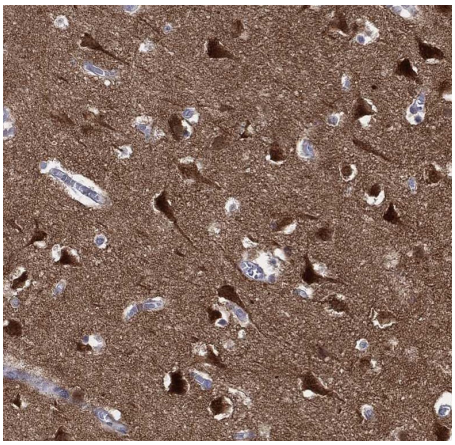


Anti-HLA-DOA (Cat. HPA076922)
Major Histocompatibility Complex II, DO Alpha
IHC staining of **human tonsil** showing strong cytoplasmic positivity in germinal and non-germinal center cells (brown).

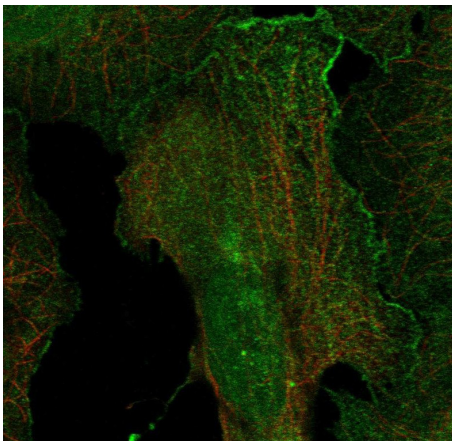
SELECTED TRIPLE A POLYCLONALS BY RESEARCH AREA

NEUROSCIENCE

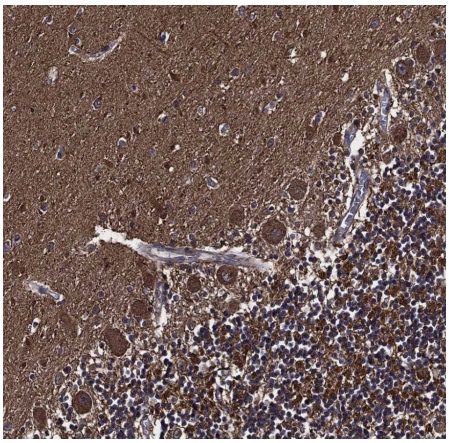
Triple A polyclonal antibodies are instrumental in neuroscience research as they enable the precise identification and localization of specific proteins, neurotransmitters, and receptors within the complex neural networks of the brain. By using these antibodies, you can map neuronal pathways, study synaptic connections, and investigate the expression patterns of critical molecules involved in brain function and neurodegenerative disorders. This detailed molecular understanding, facilitated by Triple A polyclonal antibodies, is essential for advancing our knowledge of neurobiology, leading to insights into neurological diseases, drug development, and potential therapeutic interventions.



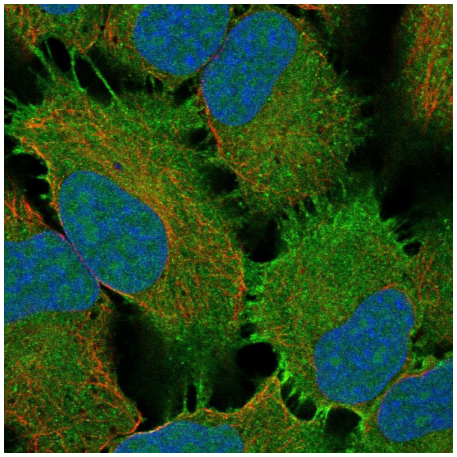
Anti-DLG4 (Cat. HPA071006)
Discs Large MAGUK Scaffold Protein 4
IHC staining of **human cerebral cortex** showing strong cytoplasmic and nuclear positivity in neuronal cells (brown).



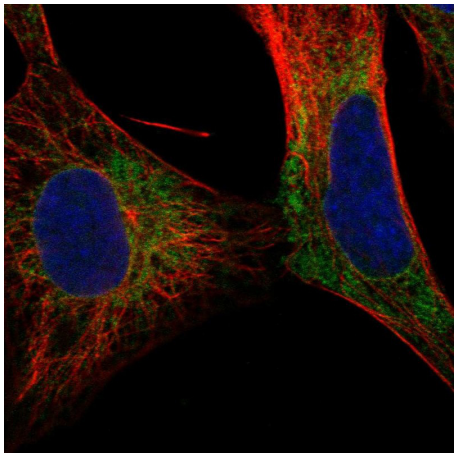
Anti-DRD4 (Cat. HPA062682)
Dopamine Receptor D4
ICC-IF staining of **human cell line U2OS** (osteosarcoma) showing localization to plasma membrane (green).



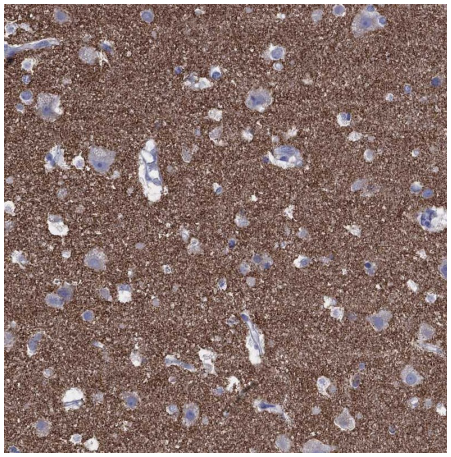
Anti-HTT (Cat. HPA051524)
Huntingtin
IHC staining of **human cerebellum** showing high staining in Purkinje cells, and moderate staining in the granular and molecular cell layers, (brown).



Anti-KCNG4 (Cat. HPA063516)
Potassium Voltage-Gated Channel Modifier G4
ICC-IF staining of **human cell line HeLa** (cervical cancer) showing localization to plasma membrane (green).



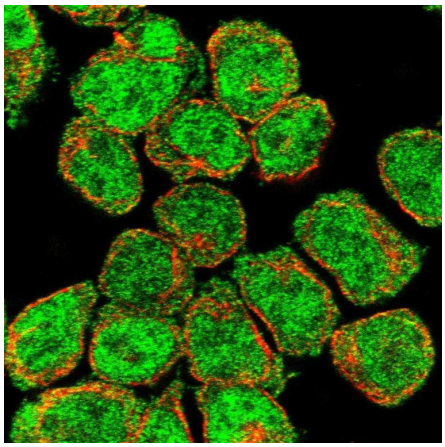
Anti-SLC17A8 (Cat. HPA038870)
Solute Carrier Family 17 Member 8
Immunofluorescent staining of **human cell line SuSa** (testicular germ cell tumor) showing localization to endoplasmic reticulum (green).



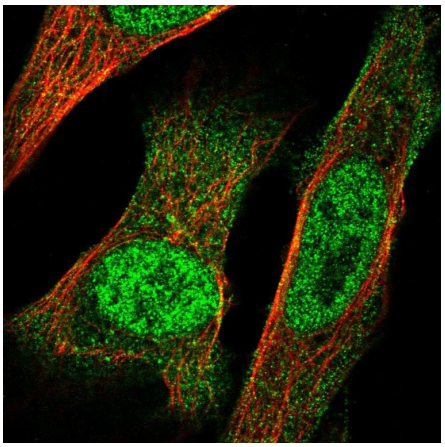
Anti-SYP (Cat. HPA079659)
Synaptophysin
IHC staining of **human cerebral cortex** showing strong positivity in neuropil (brown).

STEM CELLS & DEVELOPMENT

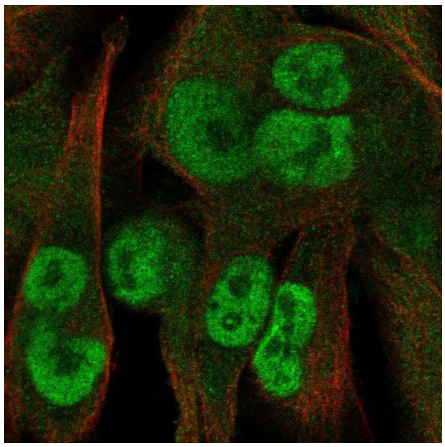
Triple A polyclonal antibodies play a vital role in stem cells and development research by enabling you to identify unique markers and signaling molecules crucial for understanding cellular differentiation and embryonic development. These antibodies allow you to track specific protein expression patterns, helping to characterize stem cell populations and monitor their differentiation into specialized cell types. By providing insights into the molecular mechanisms governing stem cell behavior and tissue formation, Triple A polyclonal primary antibodies contribute significantly to advancing regenerative medicine and therapeutic applications, paving the way for innovative treatments and tissue engineering approaches.



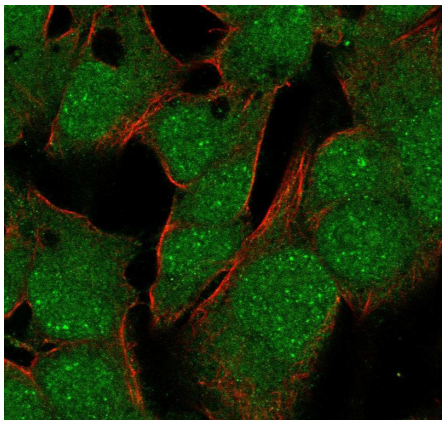
Anti-CITED2 (Cat. HPA069092)
Cbp/p300 Interacting Transactivator, Glu/Asp Rich Carboxy-Termi Dom 2
ICC-IF staining of **human cell line HEL** (acute erythroid leukemia) showing nucleoplasm and cytosol staining (green).



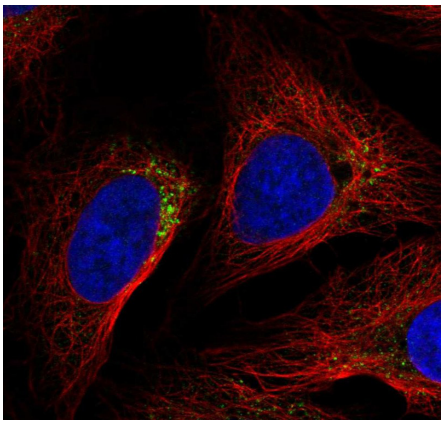
Anti-IRX3 (Cat. HPA066576)
Iroquois Homeobox 3
ICC-IF staining of **human cell line U2OS** (osteosarcoma) showing localization to nucleoplasm and cytosol (green).



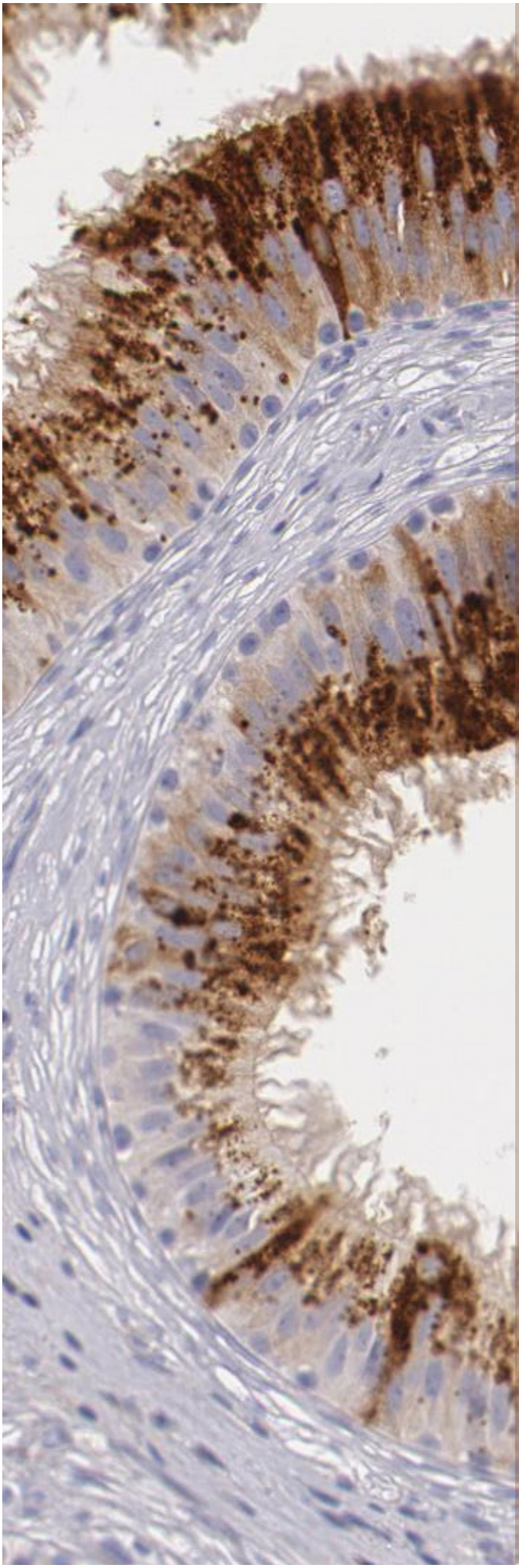
Anti-KCTD15 (Cat. HPA042522)
Potassium Channel Tetramerization Domain Containing 15
ICC-IF staining of **human cell line SK-MEL-30** (melanoma) showing localization to nucleoplasm (green).



Anti-TBX10 (Cat. HPA076197)
T-box Transcription Factor 10
ICC-IF staining of **human cell line Hep-G2** (liver cancer) showing localization to nucleoplasm and cytosol (green).



Anti-NLRP5 (Cat. HPA047260)
NLR Family Pyrin Domain Containing 5
ICC-IF staining of **human cell line U2OS** (osteosarcoma) showing localization to the Golgi apparatus and vesicles.



ATLAS ANTIBODIES

CUSTOMER'S NEEDS

- Specific and effective biomarkers able to identify early stages of the disease and reliable prognostic markers for predicting clinical responses as well as defining the divergent molecular pathways underlying the development of the disease.
- Protein-related data such as citations, application-specific validation and sequence information, and homology, are paramount in the buying process and the single biggest driver for antibody choice.
- A trusted source of data in order to feel confident in the purchase of new antibodies.

WHY ATLAS ANTIBODIES?

Atlas Antibodies is the original manufacturer of the primary antibodies used to build the Human Protein Atlas.

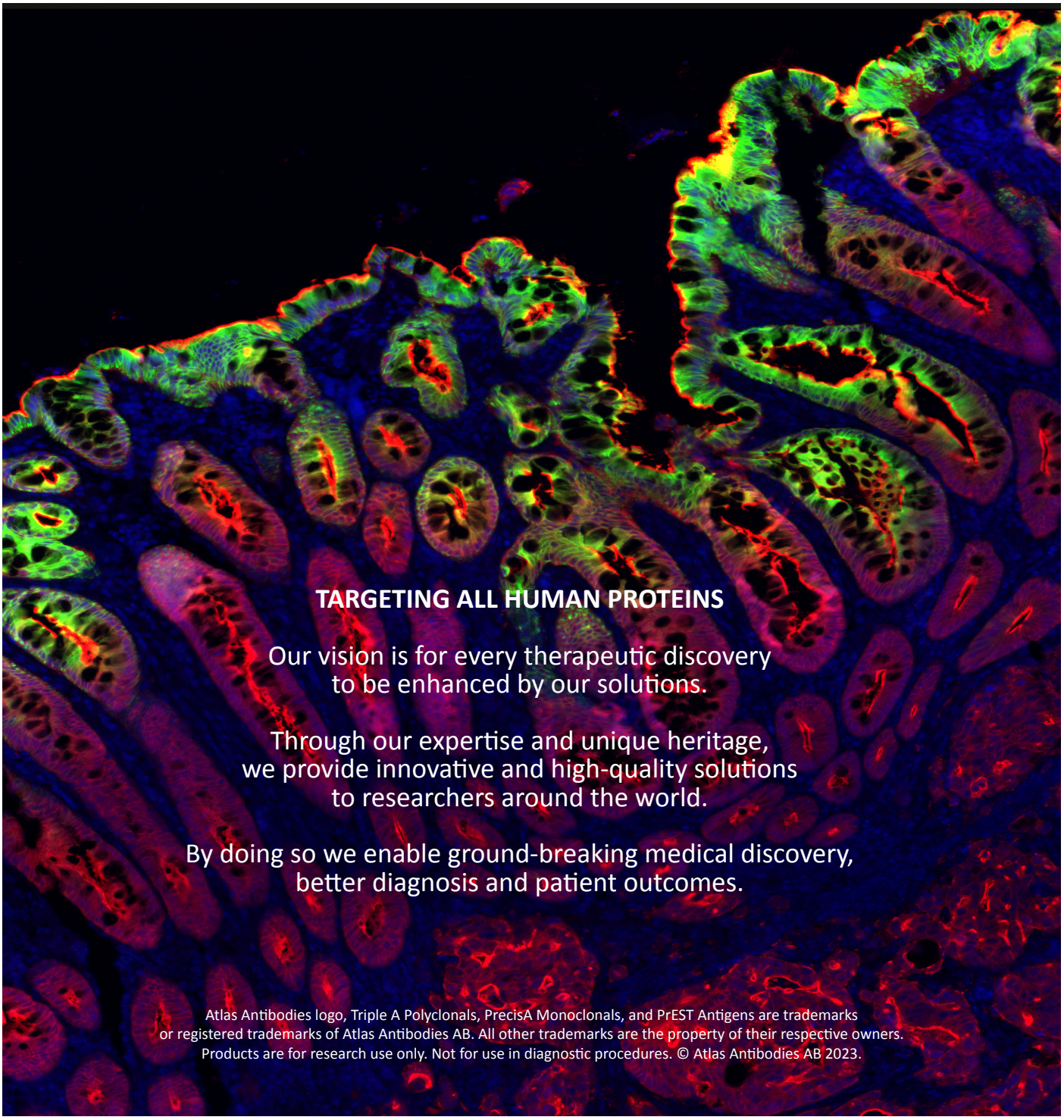
Atlas Antibodies continues searching for better early detection markers and new therapeutic targets.

- A catalog of over 22,000 antibodies
- Over 12,000 product citations worldwide
- Application-specific Enhanced Validation
- Strong roots in the Human Protein Atlas
- Transparency & Open Access Data

CONTACT US

Need help with a technical question?
We're here to help you! Your e-mail inquiries will be responded to within 48 hours.

Contact Customer Services at:
support@atlasantibodies.com



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