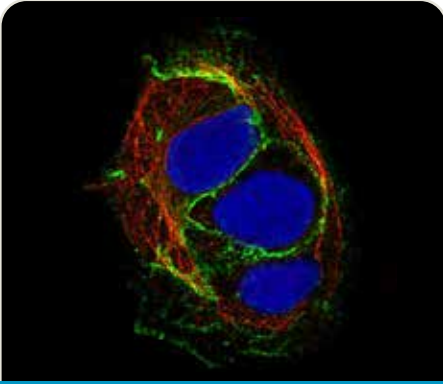


APPLICATION-SPECIFIC VALIDATION

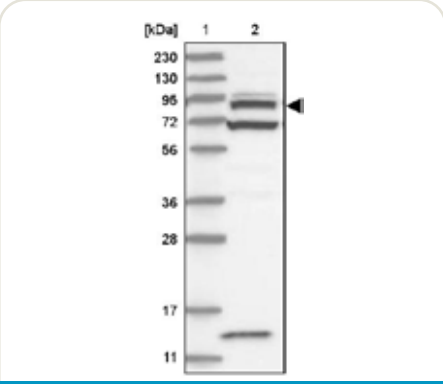
Validation you can verify, for the application you actually need. Four applications. One open scientific record.



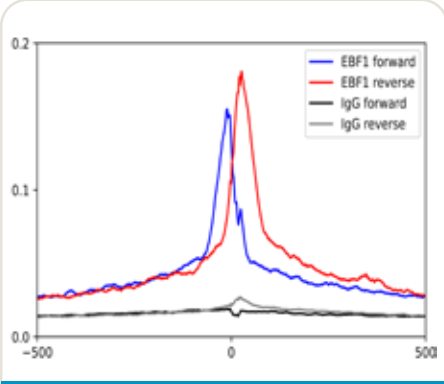
17,000+
IHC
44 normal tissues ·
20 common cancers



11,000+
ICC-IF
Confocal imaging ·
49 subcellular structures



9,000+
Western blot
Cell lines, tissues and
knockdown controls



750+
ChIP-Exo-Seq
Benchmarked at Cornell Uni.
(Pugh lab)

Fewer failed experiments, Less wasted sample.

Every Atlas Antibodies product is validated using methods developed within the Human Protein Atlas, where an antibody counts as validated only when it performs in a complex biological sample.

An antibody that works in one application may not work in another, so we test each antibody for the application it is sold for. We only list an application when the antibody meets our validation criteria.

Enhanced validation: confirming specificity

Beyond standard validation, we confirm specificity using *enhanced validation methods* by testing targets against the five pillars established by the International Working Group for Antibody Validation (IWGAV) ensuring the signal reflects genuine biology, not an off-target artifact.

Why it matters: A crisp band or distinct stain confirms reactivity, but it doesn't prove specificity. Enhanced validation goes beyond standard QC.

ENHANCED VALIDATION AT A GLANCE

Antibody specificity is further confirmed using complementary enhanced validation approaches.

Method	IHC	ICC-IF	WB	ChIP-Exo-Seq
Orthogonal: antibody-free proof. Signal matches RNA-seq	✓	—	✓	—
Genetic (KO/KD): absolute specificity siRNA knockdown drops the signal	—	✓	✓	—
Independent antibody: cross-confirmation Two antibodies, same pattern	✓	✓	✓	—
Recombinant expression: target capture proof. Tagged or over-expressed target	—	✓	✓	—
Independent benchmark External lab, functional assay	—	—	—	✓

Tissue and Cell Validation



IHC · 17,000+ ANTIBODIES

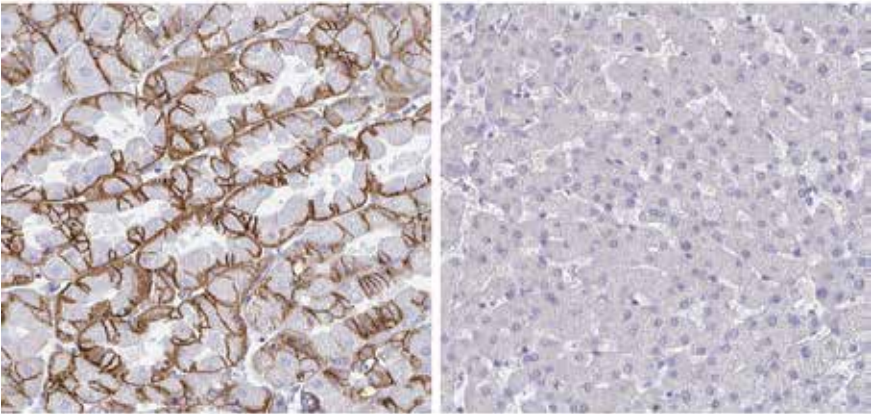
FFPE-TMAs

44 normal tissues

20 common cancers

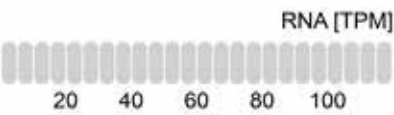
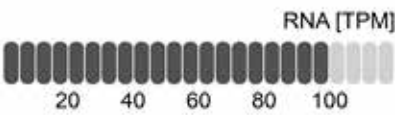
Antibody specificity is further confirmed using two complementary enhanced validation methods.

1 · ORTHOGONAL



CA9 in Stomach

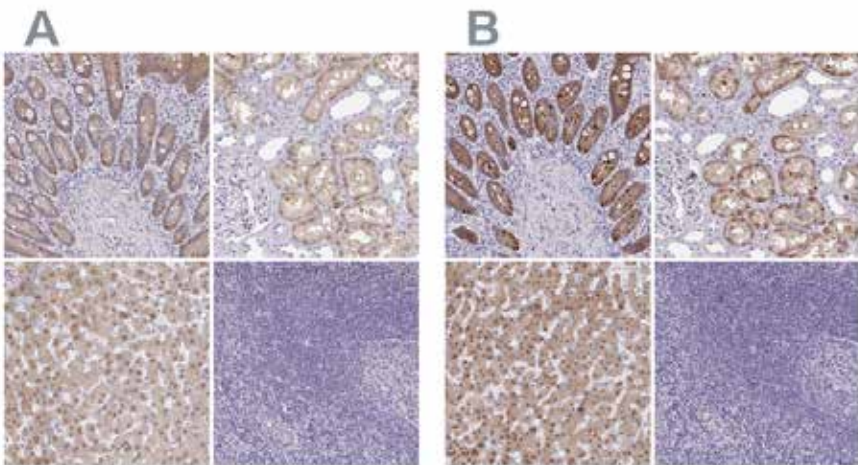
CA9 in Liver



Protein matches RNA

Anti-CA9 (HPA055207). Strong staining in stomach, no staining in liver, in line with RNA levels in both tissues.

2 · INDEPENDENT ANTIBODY



Two antibodies. Same target. One pattern.

Anti-A1CF HPA037779 (A) and HPA044079 (B) bind different regions of the protein and show the same staining in four tissues.

ICC-IF · 11,000+ ANTIBODIES

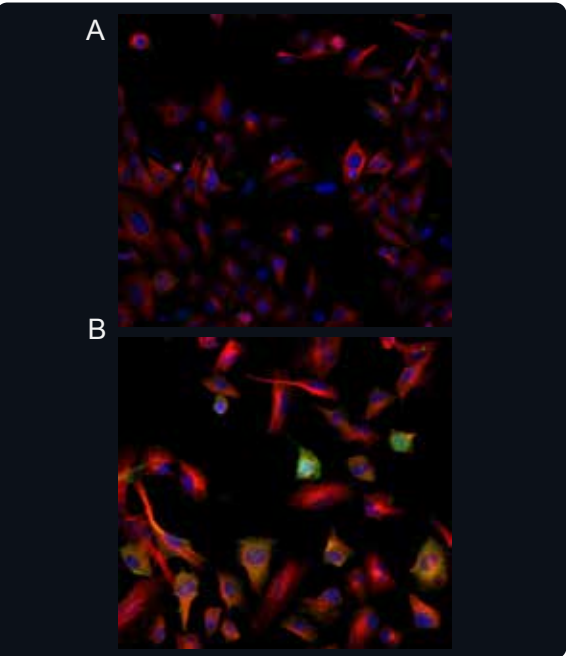
up to 3 cell lines

reference markers

49 subcellular structures

Antibody specificity is further confirmed using three complementary enhanced validation methods.

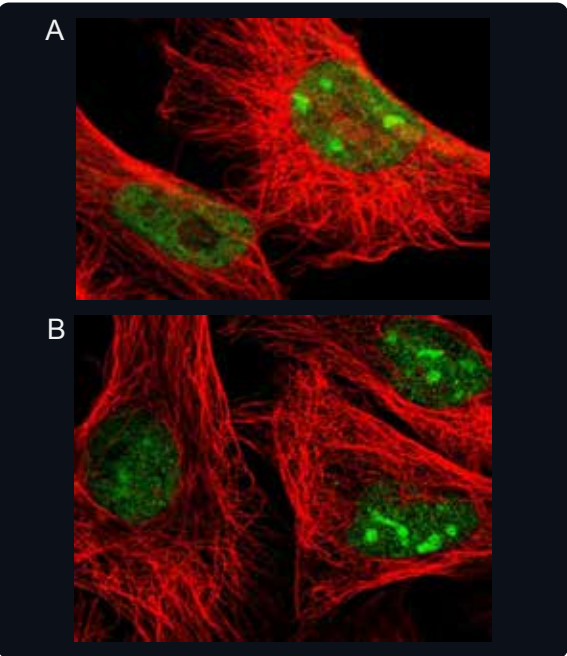
1 · GENETIC



Knockdown drops signal

Anti-CCNB1 (HPA030741) in U-2 OS cells. Staining decreases after siRNA knockdown of the target gene (A), compared with a scrambled siRNA control (B).

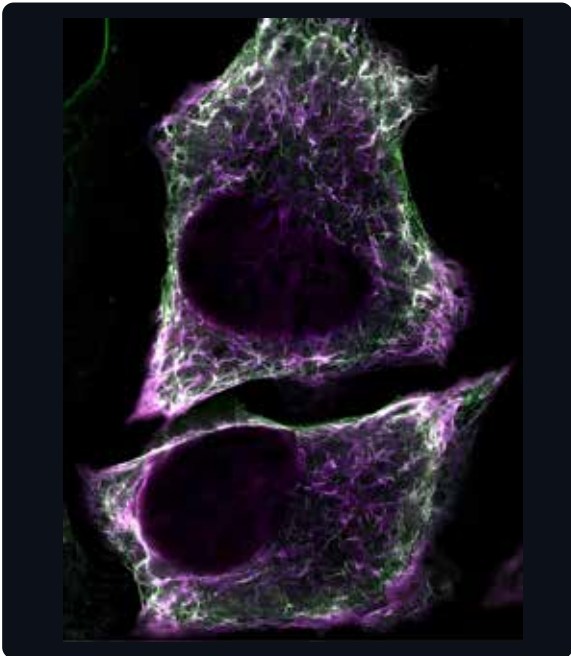
2 · INDEPENDENT ANTIBODY



Two antibodies. Same location.

Anti-ADAR HPA003890 (A) and HPA051519 (B) bind different regions of the protein and stain the same subcellular structure (green). Human cell line U-251MG

3 · RECOMBINANT (GFP tag)



Antibody and GFP tag overlaps

Anti-NES (HPA006286) in HeLa cells expressing GFP-tagged nestin. Antibody staining of intermediate filaments overlaps the GFP signal.

Questions about validation data?
We'll show you.

atlasantibodies.com
Open data · proteintatlas.org

WB and ChIP Validation



WESTERN BLOT · 9,000+ ANTIBODIES

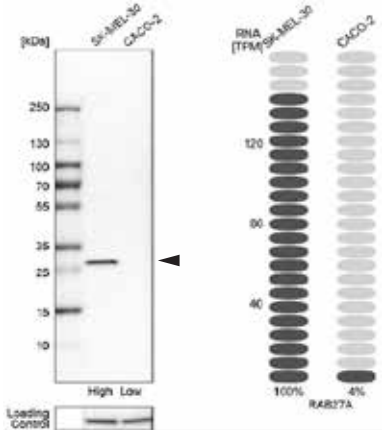
cross-species

tissues & cell lines

endogenous lysates

Antibody specificity in WB is confirmed using four complementary **enhanced validation** approaches.

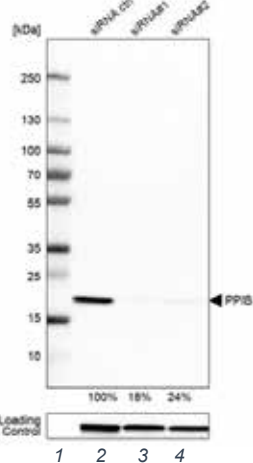
1 · ORTHOGONAL - RNA



Band follows RNA

Anti-RAB27A (HPA001333)
Strong band in SK-MEL-30,
weak in CACO-2, in line with
RNA levels.

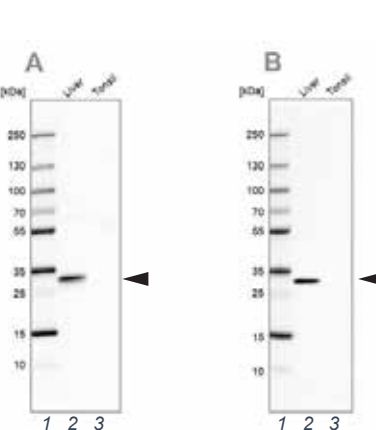
2 · GENETIC siRNA



Knockdown drops signal

Anti-PPIB (HPA012720) in
U-251 cells. siRNA-mediated
gene knockdown (lanes 2,3)
reduces the signal accordingly.

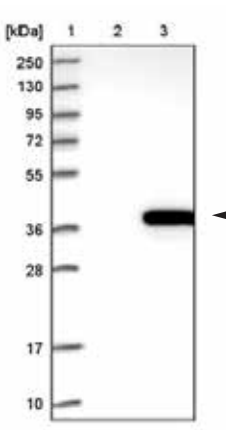
3 · INDEPENDENT ANTIBODY



Same band, two antibodies

Anti-PBLD HPA038036 (A)
and HPA038035 (B) show
the same band in liver (lane 2)
and no signal in tonsil (lane 3).

4 · RECOMBINANT



Band only with target

Anti-ACY3 (HPA039219). Band in
ACY3 over-expressing HEK293T
cells (lane 3), none in vector
control (lane 2).

CHIP-EXO-SEQ · 750+ ANTIBODIES

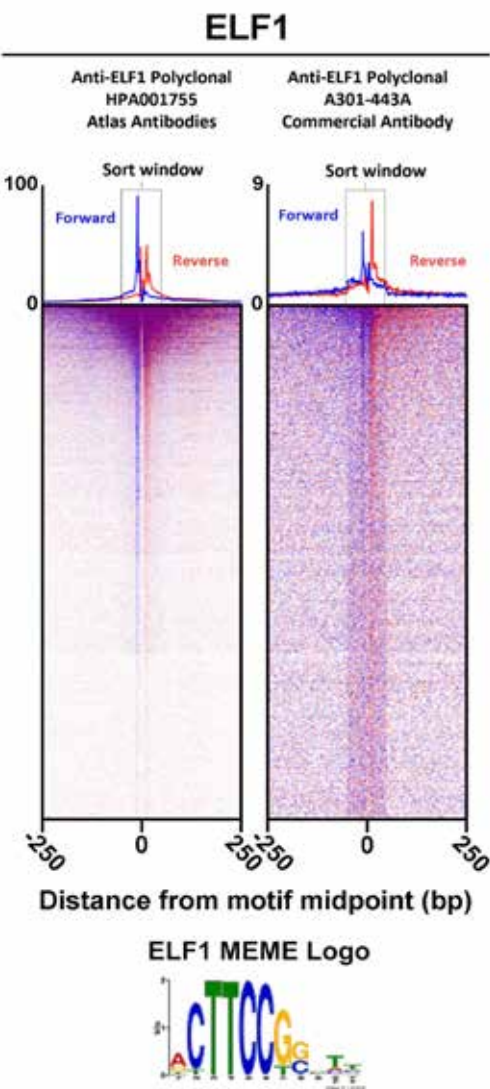
1bp resolution

IgG controls

independent benchmark

Tested independently in the lab of Prof. B. F. Pugh, Cornell University, pioneer of the ChIP-Exo-Seq method.

1 · BENCHMARKED HEAD-TO-HEAD

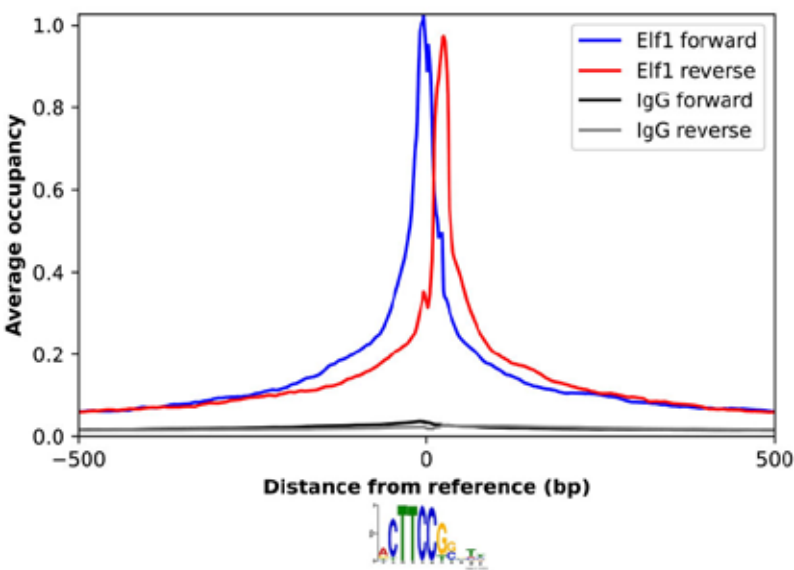


Cleaner enrichment

Anti-ELF1 (HPA001755)
(left) vs a commercial
anti-ELF1 antibody
(right), both in K562
cells.

The Atlas Antibodies
antibody shows
stronger, sharper
enrichment at the ELF1
binding motif.

2 · SIGNAL VS. IgG



Clear peak, flat control

ChIP-Exo-Seq composite profile of Anti-ELF1 (HPA001755) in K562 cells, showing strand-specific reads and IgG controls. Plots are smoothed by a 21 bp moving average across 460 sites. A strong peak is observed at the binding site, while the IgG control remains flat, indicating robust and precise target enrichment. Data from Prof. B. F. Pugh's Lab, Cornell University.

Twenty years of validated antibodies, rigorous science, and global impact.

Built on the Human Protein Atlas. From researchers, to researchers.

Validation you can verify. Not a summary we wrote. The data itself.

Our validation data isn't a marketing asset. It's a public scientific record.

Every Triple A Polyclonal™ antibody carries an HPA identifier. Type it into the Human Protein Atlas database and the underlying characterization data is right there openly published and freely browsable.

1

Find the HPA ID
On every product page

HPA012720

2

Enter it at:
proteinallas.org

3

See the data
Images, scores, RNA data

Documented since 2006. Open, public, and permanent.

We stand behind our validation data published in the open on the Human Protein Atlas database.

PROOF POINTS

01 Designed for specificity

Every antigen selected in silico for uniqueness within the human proteome.

02 Made in-house

Antigen production and quality control under one roof in Sweden.

03 Antigen-specific affinity purification

Every antibody captured on its own antigen-specific affinity column.

04 Benchmarked, not assumed

Selectivity tested against hundreds of proteins on arrays and in complex lysates and tissues.

05 Published, not just catalogued

Born in the Human Protein Atlas, documented in the open via the HPA identifier on proteinallas.org;

06 Failures are not for sale

Antibodies that fail specificity benchmarking are removed. It's part of the workflow, not the fine print.

07 20 years, 1 philosophy

Our antibodies were created to answer scientific questions first and became products afterward (2006–2026)



2006-2026 Born from the Human Protein Atlas,
Atlas Antibodies celebrates two decades mapping the human proteome.

