abcam

ab10135

Anti-TAGLN/Transgelin antibody

Anti-TAGLN/Transgelin antibody (ab10135) is a goat polyclonal antibody detecting TAGLN/Transgelin in **Western Blot, Flow Cytometry, IHC-P, IHC-Fr, ICC/IF**. Suitable for **Human, Mouse, Rabbit, Rat**.

- Over 130 publications
- Trusted since 2004

Key facts

Isotype	IgG
Host species	Goat
Storage buffer	pH: 7.3 Preservative: 0.02% Sodium azide Constituents: Tris buffered saline, 0.5% BSA
Form	Liquid
Clonality	Polyclonal
Immunogen	Synthetic Peptide within Human TAGLN aa 150-200. The exact immunogen used to generate this antibody is proprietary information. Database link Q01995
Purification technique	Affinity purification Immunogen
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.

Reactivity data

Flow Cyt

Expected

Species	Mouse
Dilution info	-
Notes	ab37373 - Goat polyclonal IgG, is suitable for use as an isotype control with this antibody.

Species	Rat
Dilution info	-
Notes	ab37373 - Goat polyclonal IgG, is suitable for use as an isotype control with this antibody.

Species	Human
Dilution info	-
Notes	ab37373 - Goat polyclonal IgG, is suitable for use as an isotype control with this antibody.

Species	Rabbit
Dilution info	-
Notes	ab37373 - Goat polyclonal IgG, is suitable for use as an isotype control with this antibody.

Predicted

Species	Cow, Dog
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	0.1-1 µg/mL
Notes	Primary incubation for 1 hour at room temperature.

Predicted

Species	Cow, Dog, Rat, Mouse, Rabbit

Dilution info	-
Notes	-

IHC-FoFr

Expected

Species	Mouse, Rat, Human, Rabbit
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Cow, Dog
Dilution info	-
Notes	-

IHC-P

Expected

Species	Mouse, Rat, Human, Rabbit
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Cow, Dog
Dilution info	-
Notes	-

ICC/IF

Expected

Species	Mouse, Rat, Human, Rabbit
Dilution info	Use at an assay dependent concentration.

Notes	-

Predicted

Species	Cow, Dog
Dilution info	-
Notes	-

IHC-Fr

Expected

Species	Mouse, Rat, Human, Rabbit
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Cow, Dog
Dilution info	-
Notes	-

Target data

See full target information TAGLN

Function	Actin cross-linking/gelling protein (By similarity). Involved in calcium interactions and contractile properties of the cell that may contribute to replicative senescence.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C

Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

What is this antibody validated in?
Anti-TAGLN/Transgelin antibody (ab10135) is a goat polyclonal antibody and is validated for use in Western Blot (WB), Flow Cytometry (Flow Cyt), Immunohistochemistry (IHC-P), Immunohistochemistry (IHC-Fr), Immunocytochemistry/immunofluorescence (ICC/IF) in Human, Mouse, Rabbit, Rat samples.

Tagged protein detection
TAGLN/Transgelin antibodies are used to visualize proteins labelled with this tag in a variety of applications.

What is the molecular weight of TAGLN/Transgelin?
Anti-TAGLN/Transgelin (ab10135) specifically detects a band for TAGLN/Transgelin (UniProt: Q01995) at a molecular weight of 23kDa.

Trusted by the scientific community
Anti-TAGLN/Transgelin (ab10135) was first used in a scientific publication in 2004 and has been cited over 130 times in peer-reviewed journals.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	TAGLN also known as Transgelin or SM22-alpha is a protein with a molecular weight of approximately 22 kDa. Structurally it belongs to the calponin family and contains an ACT domain which is critical for its actin-binding ability. It is expressed abundantly in smooth muscle cells where it stabilizes cytoskeletal dynamics by interacting with actin filaments. TAGLN also shows expression in fibroblasts and myofibroblasts supporting structural integrity and cellular movement.
Biological function summary	The regulatory involvement of TAGLN in smooth muscle contraction influences cellular activities essential for vascular function. This protein modulates remodeling and differentiation within smooth muscle cells. It can associate with actin and calponin to form complexes that regulate the stability of cytoskeletal structures ensuring effective cellular responses to mechanical stimuli. By linking signal transduction to cytoskeletal mechanics TAGLN facilitates the maintenance of cell shape and tension.
Pathways	TAGLN plays a role in the regulation of the RhoA/Rho kinase pathway contributing to actin cytoskeleton organization and smooth muscle contraction. Additionally it is involved in the WNT signaling pathway influencing cell proliferation and differentiation. In these pathways TAGLN works with proteins like RhoA and beta-catenin to transmit signals from the extracellular environment to the nucleus impacting gene expression and cellular responses.

Associated diseases and disorders	Disruptions in TAGLN expression associate with vascular diseases and certain cancers. Downregulation or altered expression patterns can lead to smooth muscle cell dysfunction contributing to atherosclerosis. Similarly TAGLN interacts with proteins such as fibronectin and MMP2 in cancer where its altered expression could promote metastasis and tumor progression. Understanding these connections highlights TAGLN's potential as a target for therapeutic interventions in these diseases.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

1 product image



Western blot - Anti-TAGLN/Transgelin antibody (ab10135)

TAGLN/Transgelin Western blot staining of Human Testes lysate using goat Anti-TAGLN/Transgelin antibody

All lanes:
Western blot - Anti-TAGLN/Transgelin antibody (ab10135) at 0.3 µg/mL

All lanes:
Human Testes lysate at 35 µg

Predicted band size: 23 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.