

# transgelin-2 (H-40): sc-134794

## BACKGROUND

Transgelin (also designated SM22 $\alpha$ ), is expressed abundantly in smooth muscle cells. Transgelin-2 (also known as SM22 $\alpha$  homolog) is a homolog of transgelin and is also expressed in smooth muscle cells and by peritoneal B-1 cells. The human transgelin-2 gene (designated TAGLN2), which is located on chromosome 1q23.2, encodes a 199 amino acid protein that contains a calponin-like repeat and a calponin-homology (CH) domain. Transgelin-2 may function very similarly to transgelin. During embryogenesis, transgelin is expressed in smooth, cardiac and skeletal muscle, but is restricted during late fetal development and adulthood to all vascular and visceral smooth muscle cells and low levels of expression in heart. Transgelin is downregulated in several transformed cell lines, indicating that a reduction of transgelin expression may be an early indicator of the onset of transformation. Transgelin also binds actin, causing actin fibers to gel within minutes of binding. Binding of transgelin to actin occurs at a ratio of 1:6 actin monomers.

## REFERENCES

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- Kultima, K., et al. 2004. Valproic acid teratogenicity: a toxicogenomics approach. *Environ. Health Perspect.* 112: 1225-1235.
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## CHROMOSOMAL LOCATION

Genetic locus: TAGLN2 (human) mapping to 1q23.2; Tagln2 (mouse) mapping to 1 H3.

## SOURCE

transgelin-2 (H-40) is a rabbit polyclonal antibody raised against amino acids 23-62 mapping near the N-terminus of transgelin-2 of human origin.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

transgelin-2 (H-40) is recommended for detection of transgelin-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

transgelin-2 (H-40) is also recommended for detection of transgelin-2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for transgelin-2 siRNA (h): sc-106633, transgelin-2 siRNA (m): sc-77363, transgelin-2 shRNA Plasmid (h): sc-106633-SH, transgelin-2 shRNA Plasmid (m): sc-77363-SH, transgelin-2 shRNA (h) Lentiviral Particles: sc-106633-V and transgelin-2 shRNA (m) Lentiviral Particles: sc-77363-V.

Molecular Weight of transgelin-2: 22 kDa.

Positive Controls: A-10 cell lysate: sc-3806, BC<sub>3</sub>H1 cell lysate: sc-2299 or HISM cell lysate: sc-2229.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **transgelin-2 (C-12): sc-373928** or **transgelin-2 (D-8): sc-515586**, our highly recommended monoclonal alternatives to transgelin-2 (H-40).