

## DESCRIPTION

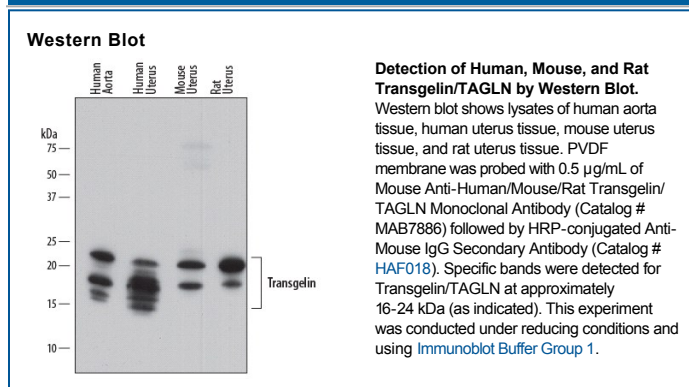
<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human Transgelin/TAGLN in direct ELISAs.
<b>Source</b>	Monoclonal Mouse IgG <sub>2A</sub> Clone # 859108
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Transgelin/TAGLN Ala2-Ser201 Accession # Q01995
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
<b>Western Blot</b>	0.5 µg/mL	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

TAGLN (Transgelin; also 22 kDa Actin-binding protein, WS3-10 and Smooth muscle protein 22 alpha) is a 22-24 kDa cytosolic member of the calponin (calcium-binding and calmodulin-binding troponin T-like protein) family of molecules. It is expressed in both visceral and vascular smooth muscle, fibroblasts, cardiac myocytes, and potentially in breast duct plus prostate epithelium. TAGLN is associated with the actin stress fibers and appears to both suppress MMP-9 production and downmodulate Ca<sup>++</sup>-independent smooth muscle contraction. Human TAGLN is 201 amino acids (aa) in length. It contains one CH/calponin homology domain (aa 24-137), and an actin-binding calponin-like repeat/CLIK (aa 175-200). There is one utilized phosphorylation site at Tyr193, plus two utilized acetylation sites in the N-terminus. Three potential isoform variants are reported, one that shows an alternative start site at Met111, a second that contains a new start site 10 aa upstream of the standard site, and a third that possesses a 58 aa substitution for aa 97-201. Full-length human and mouse TAGLN share 97% aa sequence identity.