

DESCRIPTION

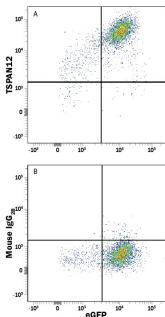
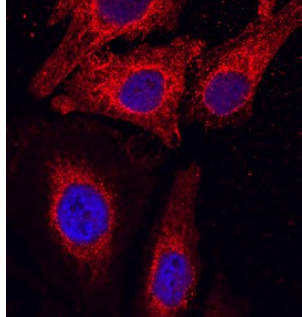
| | |
|---------------------------|---|
| Species Reactivity | Human |
| Specificity | Detects human TSPAN12 in direct ELISAs. |
| Source | Monoclonal Mouse IgG _{2B} Clone # 921938 |
| Purification | Protein A or G purified from hybridoma culture supernatant |
| Immunogen | NS0 mouse myeloma cell line transfected with human TSPAN12 Met1-Leu305 |
| Formulation | 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 |
|----------------------------|--|---------------|
| Flow Cytometry | 0.25 µg/10 ⁶ cells | See Below |
| Immunocytochemistry | 8-25 µg/mL | See Below |
| CyTOF-ready | Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation. | |

DATA

| | |
|--|--|
| <p>Flow Cytometry</p>  <p>Detection of TSPAN12 in HEK293 Human Cell Line Transfected with Human TSPAN12 and eGFP by Flow Cytometry. HEK293 human embryonic kidney cell line transfected with human TSPAN12 and eGFP was stained with either (A) Mouse Anti-Human TSPAN12 Monoclonal Antibody (Catalog # MAB8910) or (B) Mouse IgG_{2B} Isotype Control (Catalog # MAB004) followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B).</p> | <p>Immunocytochemistry</p>  <p>TSPAN12 in HeLa Human Cell Line. TSPAN12 was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Mouse Anti-Human TSPAN12 Monoclonal Antibody (Catalog # MAB8910) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p> |
|--|--|

PREPARATION AND STORAGE

| | |
|--------------------------------|--|
| Reconstitution | Reconstitute at 0.5 mg/mL in sterile PBS. |
| Shipping | 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 |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

BACKGROUND

TSPAN12 is a member of the transmembrane 4 superfamily, also known as the tetraspanin family. They mediate signal transduction events that play a role in the regulation of cell development, activation, growth and motility. TSPAN12 plays a central role in retinal vascularization by regulating norrin signal transduction. TSPAN12 acts in concert with norrin to promote FZD4 multimerization and subsequent activation of FZD4, leading to promote accumulation of beta-catenin and stimulate LEF/TCF-mediated transcriptional programs. Defects in TSPAN12 are the cause of vitreoretinopathy exudative type 5, a disorder of the retinal vasculature characterized by an abrupt cessation of growth of peripheral capillaries, leading to an avascular peripheral retina.