

TSPAN12 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP8693b

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q95859
Other Accession	Q569A2 , Q8BKT6 , Q29RH7
Reactivity	Human
Predicted	Bovine, Mouse, Rat, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB22652
Calculated MW	35383
Antigen Region	232-259

Additional Information

Gene ID	23554
Other Names	Tetraspanin-12, Tspan-12, Tetraspan NET-2, Transmembrane 4 superfamily member 12, TSPAN12, NET2, TM4SF12
Target/Specificity	This TSPAN12 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 232-259 amino acids from the C-terminal region of human TSPAN12.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	TSPAN12 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TSPAN12
Synonyms	NET2, TM4SF12

Function

Regulator of cell surface receptor signal transduction. Plays a central role in retinal vascularization by regulating norrin (NDP) signal transduction. Acts in concert with norrin (NDP) to promote FZD4 multimerization and subsequent activation of FZD4, leading to promote accumulation of beta-catenin (CTNNB1) and stimulate LEF/TCF-mediated transcriptional programs. Suprisingly, it only activates the norrin (NDP)-dependent activation of FZD4, while it does not activate the Wnt- dependent activation of FZD4, suggesting the existence of a Wnt- independent signaling that also promote accumulation the beta-catenin (CTNNB1) (By similarity). Acts as a regulator of membrane proteinases such as ADAM10 and MMP14/MT1-MMP. Activates ADAM10-dependent cleavage activity of amyloid precursor protein (APP). Activates MMP14/MT1-MMP- dependent cleavage activity.

Cellular Location

Cell membrane; Multi-pass membrane protein

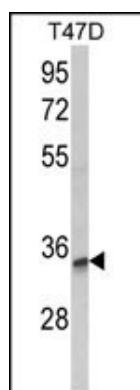
Background

TSPAN12 is a member of the transmembrane 4 superfamily, also known as the tetraspanin family. Most of these members are cell-surface proteins that are characterized by the presence of four hydrophobic domains. The proteins mediate signal transduction events that play a role in the regulation of cell development, activation, growth and motility.

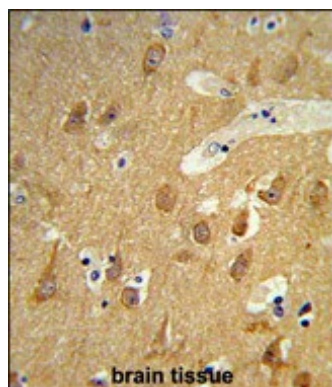
References

Xu,D., et.al., FASEB J. 23 (11), 3674-3681 (2009)
Berditchevski,F.et.al., J. Cell. Sci. 114 (PT 23), 4143-4151 (2001)

Images

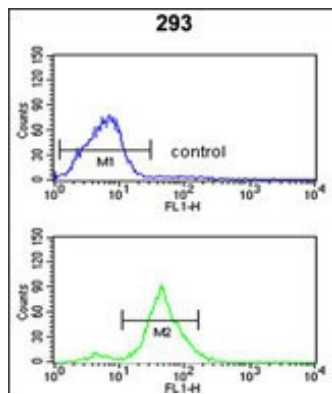


Western blot analysis of TSPAN12 Antibody (C-term) (Cat. #AP8693b) in T47D cell line lysates (35ug/lane). TSPAN12 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human brain tissue reacted with TSPAN12 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

TSPAN12 Antibody (C-term) (Cat. #AP8693b) flow cytometric analysis of 293 cells (bottom histogram)



compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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