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TSPAN1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8693c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	O60635
Other Accession	NP_005718.2
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23225
Calculated MW	26301
Antigen Region	140-167

Additional Information

Gene ID	10103
Other Names	Tetraspanin-1, Tspan-1, Tetraspan NET-1, Tetraspanin TM4-C, TSPAN1
Target/Specificity	This TSPAN1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 140-167 amino acids of human TSPAN1.
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	TSPAN1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TSPAN1
Function	Structural component of specialized membrane microdomains known as tetraspanin-enriched microdomains (TERMs), which act as platforms for receptor clustering and signaling. Participates thereby in diverse biological

functions such as cell signal transduction, adhesion, migration and protein trafficking (PubMed:30066932, PubMed:30291375). Regulates neuronal differentiation in response to NGF by facilitating NGF-mediated activation of NTRK1/TRKA receptor tyrosine kinase and subsequent downstream signaling pathways (By similarity). Plays a role in the inhibition of TNFalpha-induced apoptosis. Mechanistically, inhibits the NF-kappa-B signaling pathway by blocking phosphorylation of CHUK (PubMed:30291375). Also promotes the stability of the thiamine transporter 1/SLC19A2 in intestinal epithelial cells leading to an increase of thiamine uptake process (PubMed:21836059).

Cellular Location Cell membrane; Multi-pass membrane protein. Lysosome membrane; Multi-pass membrane protein

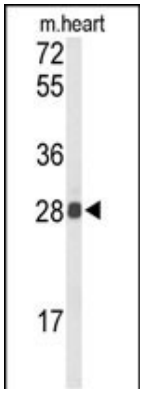
Background

TSPAN1 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.

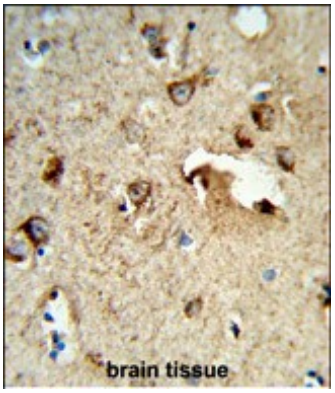
References

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

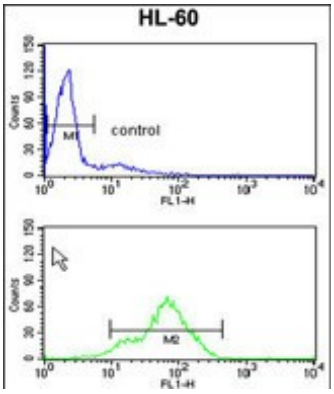


Western blot analysis of TSPAN1 Antibody (Center) (Cat. #AP8693c) in mouse heart tissue lysates (35ug/lane). TSPAN1 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human brain tissue reacted with TSPAN1 Antibody (Center), 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.

TSPAN1 Antibody (Center) (Cat. #AP8693c) flow cytometry analysis of HL-60 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'.