Data Sheet (Cat.No.TMAB-11793)

TargetMol

Anti-ProSAPiP1 Polyclonal Antibody

Product Details

Ig Type:	IgG
Reactivity:	Mouse,Rat (predicted:Human,Dog,Pig,Cow,Horse,Rabbit)
Molecular Weight:	Theoretical: 72 kDa. Actual: 72 kDa.
Purification:	Protein A purified

Applications

Verified Activity:	1. Blank control: RSC96 (blue), the cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with ice-cold 90% methanol for 30 min on ice. Isotype Control Antibody: Rabbit IgG (orange); Secondary Antibody: Goat anti-rabbit IgG-FITC (white blue), Dilution: 1: 200 in 1 X PBS containing 0.5% BSA; Primary Antibody Dilution: 1 μg in 100 μL1X PBS containing 0.5% BSA (green). 2. Sample: Eye (Mouse) Lysate at 40 μg Primary: Anti-ProSAPiP1 (TMAB-11793) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 72 kD Observed band size: 72 kD
Application:	WB,FCM
Recommended	WB: 1:500-2000; FCM: 1μg/Test

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	KLH conjugated synthetic peptide: human ProSAPiP1
Antigen Species:	Human
Gene ID:	9762
Uniprot ID:	O60299

Research Background

The ProSAP family of proteins contain many protein-protein interaction domains and serve as scaffolding mediators within the post-synaptic density (PSD) of excitatory brain synapses. The PSD is an electron-dense structure underneath the post-synaptic plasma membrane of excitatory synapses that anchors and clusters glutamate receptors opposite to the pre-synaptic neurotransmitter release site. Shank proteins contain PDZ modular domains that coordinate the synaptic localization of ion channels, receptors, signaling enzymes, and cell adhesion molecules. The PDZ domain mediates protein-protein interactions via the recognition of a conserved sequence motif at the C-terminus of their target protein(s). ProSAPiP1 (proline rich synapse associated protein interacting protein 1) is a 673 amino acid protein that interacts with the PDZ domain of Shank 3. ProSAPiP1 expression is brain-specific

with highest expression within the cerebellum, hippocampus and cerebral cortex.