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Anti-TRIO Picoband Antibody

Catalog # ABO12587

Product Information

Application	WB
Primary Accession	O75962
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Triple functional domain protein(TRIO) detection. Tested with WB in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	7204
Other Names	Triple functional domain protein, 2.7.11.1, PTPRF-interacting protein, TRIO
Calculated MW	346900
Application Details	Western blot, 0.1-0.5 □g/ml, Human, Mouse, Rat
Subcellular Localization	Cytoplasm .
Tissue Specificity	Highly expressed in heart, skeletal muscle, brain, pancreas, placenta, liver, kidney and lung.
Source	Eukaryota
Protein Name	Triple functional domain protein
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human TRIO (787-830aa QLRIFERDAIDIISDLESWNDELSQQMNDFDTEDLTIAEQRLQH), identical to the related mouse and rat sequences.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

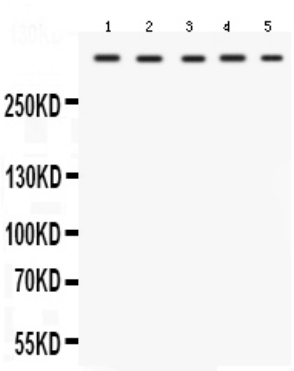
Protein Information

Name	TRIO
Function	Guanine nucleotide exchange factor (GEF) for RHOA and RAC1 GTPases (PubMed:22155786, PubMed:27418539, PubMed:8643598). Involved in coordinating actin remodeling, which is necessary for cell migration and growth (PubMed:10341202, PubMed:22155786). Plays a key role in the regulation of neurite outgrowth and lamellipodia formation (PubMed:32109419). In developing hippocampal neurons, limits dendrite formation, without affecting the establishment of axon polarity. Once dendrites are formed, involved in the control of synaptic function by regulating the endocytosis of AMPA-selective glutamate receptors (AMPARs) at CA1 excitatory synapses (By similarity). May act as a regulator of adipogenesis (By similarity).
Cellular Location	Cytoplasm. Cell projection {ECO:0000250|UniProtKB:Q0KL02}
Tissue Location	Widely expressed, with highest levels in heart, skeletal muscle, and brain.

Background

Triple functional domain protein is a protein that in humans is encoded by the TRIO gene. This gene encodes a large protein that functions as a GDP to GTP exchange factor. This protein promotes the reorganization of the actin cytoskeleton, thereby playing a role in cell migration and growth. Additionally, the TRIO protein contains 3 functional domains: a serine/threonine kinase domain and 2 guanine nucleotide exchange factor (GEF) domains for the family of Rho-like GTPases, specific for Rac1 and RhoA, respectively. These domains suggest that this enzyme may play a key role in several signaling pathways that control cell proliferation.

Images



Western blot analysis of TRIO expression in rat cardiac muscle extract (lane 1), rat skeletal muscle extract (lane 2), mouse cardiac muscle extract (lane 3), mouse skeletal muscle extract (lane 4) and HELA whole cell lysates (lane 5). TRIO at 347KD was detected using rabbit anti- TRIO Antigen Affinity purified polyclonal antibody (Catalog # ABO12587) at0.5 ??g/mL. The blot was developed using chemiluminescence (ECL) method .

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