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PDZD8 Rabbit pAb

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Catalog # AP59118

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q8NEN9
Reactivity	Rat, Human
Predicted	Dog, Mouse, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	128563
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PDZD8
Epitope Specificity	901-1000/1154
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	PDZD8 contains a PDZ domain. PDZ domains are protein-interaction domains that are often found in multi-domain scaffolding proteins. The function of this protein remains unknown.

Additional Information

Gene ID	118987
Other Names	PDZ domain-containing protein 8, Sarcoma antigen NY-SAR-84/NY-SAR-104, PDZD8 (HGNC:26974), PDZK8
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	PDZD8 {ECO:0000303|PubMed:29097544, ECO:0000312|HGNC:HGNC:26974}
Function	Lipid transfer and molecular tethering protein, which plays a key role in the formation of membrane contact sites between the endoplasmic reticulum

and other organelles, such as late endosomes/lysosomes and mitochondria (PubMed:29097544, PubMed:31636202, PubMed:31818884, PubMed:32686675, PubMed:33912962, PubMed:40246839, PubMed:40839735, PubMed:41512824). Facilitates the exchange of lipids at membrane contact sites between the endoplasmic reticulum and organelles by mediating the transport of lipids, such as ceramide, cholesterol and phosphatidylserine (PubMed:33912962, PubMed:40839735). Also acts as a molecular glue by undergoing liquid-liquid phase separation, forming condensates that mediate stable adhesion between endoplasmic reticulum and surrounding organelles, connecting two distinct membrane-bound vesicles coupled together (PubMed:41512824). Connects the endoplasmic reticulum to late endosomes/lysosomes, facilitating the exchange of lipids, which is crucial for membrane remodeling and processes, such as neurite outgrowth (PubMed:31636202, PubMed:32686675, PubMed:33912962). PDZD8-dependent endoplasmic reticulum-mitochondria membrane tethering is essential for endoplasmic reticulum-mitochondria Ca(2+) transfer (PubMed:29097544, PubMed:31818884, PubMed:40246839). In neurons, involved in the regulation of dendritic Ca(2+) dynamics by regulating mitochondrial Ca(2+) uptake in neurons (PubMed:29097544). Mediates lysosomal vacuolation, a process during which lysosomes abnormally enlarge into large membrane-bound sacs in response to stress such as osmotic stress: acts by mediating bulk lipid transfer from the endoplasmic reticulum to lysosomes, leading to vacuole formation (PubMed:40839735). Plays an indirect role in the regulation of cell morphology and cytoskeletal organization (PubMed:21834987). May indirectly inhibit herpes simplex virus 1 infection at an early stage (PubMed:21549406).

Cellular Location

Endoplasmic reticulum membrane; Single-pass membrane protein. Note=Localizes at mitochondria-endoplasmic reticulum contact sites (PubMed:29097544, PubMed:31818884, PubMed:41512824) Localizes at late endosome- and lysosome-endoplasmic reticulum contact sites (PubMed:31636202, PubMed:32686675, PubMed:33912962, PubMed:41512824). Localizes at lysosome-endoplasmic reticulum contact sites in response to osmotic stress (PubMed:40839735)

Background

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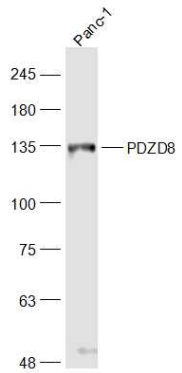
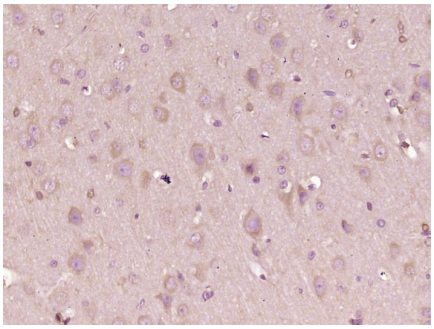
Images



Sample:
Panc-1(Human) Cell Lysate at 30 ug
Primary: Anti-PDZD8 (AP59118) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 128 kD
Observed band size: 130kD

Paraformaldehyde-fixed, paraffin embedded (rat brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase



by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PDZD8 Polyclonal Antibody, Unconjugated (AP59118) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

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