

DENN / MADD Antibody (C-Terminus)

Rabbit Polyclonal Antibody Catalog # ALS11473

Specification

DENN / MADD Antibody (C-Terminus) - Product Information

Application ICC, IF
Primary Accession Q8WXG6
Reactivity Human, Mouse, Rat
Host Rabbit
Clonality Polyclonal
Calculated MW 183kDa KDa

DENN / MADD Antibody (C-Terminus) - Additional Information

Gene ID 8567

Other Names

MAP kinase-activating death domain protein, Differentially expressed in normal and neoplastic cells, Insulinoma glucagonoma clone 20, Rab3 GDP/GTP exchange factor, MADD {ECO:0000312|EMBL:AAB57735.1, ECO:0000312|HGNC:HGNC:6766}

Target/Specificity

peptide corresponding to amino acids near the carboxy terminus of human MADD

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions

DENN / MADD Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

DENN / MADD Antibody (C-Terminus) - Protein Information

Name MADD {ECO:0000312|EMBL:AAB57735.1, ECO:0000312|HGNC:HGNC:6766}

Function

Guanyl-nucleotide exchange factor that regulates small GTPases of the Rab family (PubMed:20937701, PubMed:18559336). Converts GDP-bound inactive form of RAB27A and RAB27B to the GTP-bound active forms (PubMed:20937701, PubMed:18559336). Converts GDP-bound inactive form of RAB3A, RAB3C and RAB3D to the GTP-bound active forms, GTPases involved in synaptic vesicle exocytosis and vesicle secretion (By similarity). Plays a role in synaptic vesicle formation and in vesicle trafficking at the neuromuscular junction (By similarity). Involved in up-regulating a post-docking step of synaptic exocytosis in central synapses (By similarity). Probably by binding to the motor proteins KIF1B and KIF1A, mediates motor-dependent transport



of GTP-RAB3A- positive vesicles to the presynaptic nerve terminals (By similarity). Plays a role in TNFA-mediated activation of the MAPK pathway, including ERK1/2 (PubMed:32761064). May link TNFRSF1A with MAP kinase activation (PubMed:9115275). May be involved in the regulation of TNFA-induced apoptosis (PubMed:11577081, PubMed:32761064).

Cellular Location

Cell membrane. Cytoplasm. Cell projection, axon {ECO:0000250|UniProtKB:Q80U28}

Tissue Location

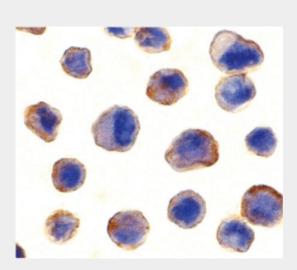
Expressed in testis, ovary, brain and heart (PubMed:8988362). Expressed in spleen, thymus, prostate, testis, ovary, small instestine and colon (PubMed:9115275). Expressed in liver (PubMed:9796103). [Isoform 2]: Expressed in the brain, breast, kidney, lung, ovary, pancreas, testis, uterus, stomach and thyroid [Isoform 4]: Expressed in the brain, breast, kidney, lung, ovary, pancreas, testis, uterus, stomach and thyroid [Isoform 6]: Not detected in the brain, breast, kidney, lung, ovary, pancreas, testis, uterus, stomach and thyroid

DENN / MADD Antibody (C-Terminus) - Protocols

Provided below are standard protocols that you may find useful for product applications.

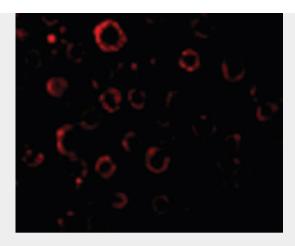
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

DENN / MADD Antibody (C-Terminus) - Images



Immunocytochemistry of MADD in human spleen tissue with MADD antibody at 10 ug/ml.





Immunofluorescence of MADD in HeLa cells with MADD antibody at 20 ug/ml.

DENN / MADD Antibody (C-Terminus) - Background

Plays a significant role in regulating cell proliferation, survival and death through alternative mRNA splicing. Isoform 5 shows increased cell proliferation and isoform 2 shows decreased. Converts GDP-bound inactive form of RAB3A, RAB3C and RAB3D to the GTP-bound active forms. Component of the TNFRSF1A signaling complex: MADD links TNFRSF1A with MAP kinase activation. Plays an important regulatory role in physiological cell death (TNF-alpha-induced, caspase-mediated apoptosis); isoform 1 is susceptible to inducing apoptosis, isoform 5 is resistant and isoform 3 and isoform 4 have no effect.

DENN / MADD Antibody (C-Terminus) - References

Chow V.T.K.,et al.DNA Seq. 6:263-273(1996). Schievella A.R.,et al.J. Biol. Chem. 272:12069-12075(1997). Chow V.T.K.,et al.Genome 41:543-552(1998). Al-Zoubi A.M.,et al.J. Biol. Chem. 276:47202-47211(2001). Nagase T.,et al.DNA Res. 4:141-150(1997).