10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

RAIDD Antibody

Catalog # ASC10010

Product Information

Application	WB, E, IHC-P
Primary Accession	P78560
Other Accession	AAB42217, 1785557
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	22745
Conjugate	Unconjugated
Application Notes	RAIDD antibody can be used for detection of RAIDD by Western blot at 1 g/mL. A 22 kDa band should be detected. Antibody can also be used for immunohistochemistry starting at 10 g/mL.

Additional Information

Gene ID	8738
Other Names	RAIDD Antibody: MRT34, RAIDD, Death domain-containing protein CRADD, Caspase and RIP adapter with death domain, CASP2 and RIPK1 domain containing adaptor with death domain
Target/Specificity	CRADD;
Reconstitution & Storage	RAIDD antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	RAIDD Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CRADD
Synonyms	RAIDD
Function	Adapter protein that associates with PIDD1 and the caspase CASP2 to form the PIDDosome, a complex that activates CASP2 and triggers apoptosis (PubMed:15073321, PubMed:16652156, PubMed:17159900, PubMed:17289572, PubMed:9044836). Also recruits CASP2 to the TNFR-1 signaling complex through its interaction with RIPK1 and TRADD and may play a role in the tumor necrosis factor-mediated signaling pathway (PubMed:8985253).

Cellular Location	Cytoplasm {ECO:0000250|UniProtKB:O88843}. Nucleus {ECO:0000250|UniProtKB:O88843}
Tissue Location	Constitutively expressed in most tissues, with particularly high expression in adult heart, testis, liver, skeletal muscle, fetal liver and kidney.

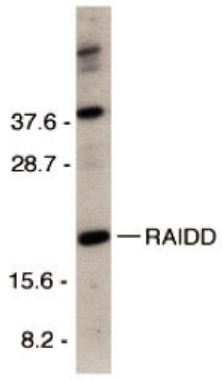
Background

RAIDD Antibody: Apoptosis, or programmed cell death, occurs during normal cellular differentiation and development of multicellular organisms. Apoptosis is induced by certain cytokines including TNF and Fas ligand of the TNF family through their death domain (DD)-containing receptors, TNFR1 and Fas. The death signals are transduced by a group of DD-containing adapter molecules. A novel cell death adapter was recently identified by two independent groups and designated RAIDD (RIP-associated ICH-1/CED-3-homologous protein with DD) and CRADD (caspase and RIP adapter with DD)1, RAIDD contains a DD and a CARD (for caspase recruitment domain) which interact with RIP and caspase, respectively, to transduce death signals. RAIDD is constitutively expressed in many tissues and mediates apoptosis caused by Fas and TNFR-1.

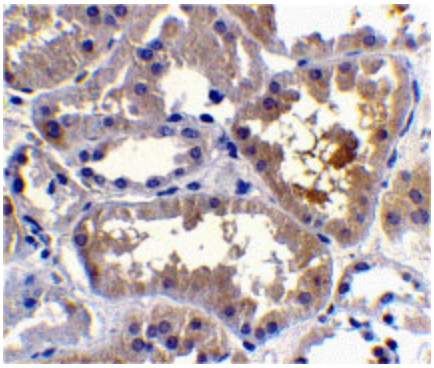
References

Duan H, Dixit VM. RAIDD is a new 'death' adaptor molecule. Nature 1997;385:86-89
Ahmad M, Srinivasula SM, Wang L, Talanian RV, Litwack G, Fernandes-Alnemri T, Alnemri ES. CRADD, a novel human apoptotic adaptor molecule for caspase-2, and FasL/tumor necrosis factor receptor-interacting protein RIP. Cancer Res 1997 57:615-619
Hofmann K, Bucher P, Tschopp J. The CARD domain: a new apoptotic signalling motif. Trends Biochem Sci 1997;22:155-156 (RD1299)

Images



Western blot analysis of RAIDD in HeLa total cell lysate with RAIDD antibody at 1 µg/mL.



Immunohistochemistry of RAIDD in human kidney tissue with RAIDD antibody at 10 µg/mL.