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ADAM2 Rabbit pAb

Catalog # AP96191

Product Information

Application	WB
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	63 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from mouse ADAM2
Epitope Specificity	451-550/735
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	Preservative: 0.02% Proclin300, Constituents: 1% BSA, 0.01M PBS, pH7.4.
SUBCELLULAR LOCATION	Membrane; Single-pass type I membrane protein.
SIMILARITY	Contains 1 disintegrin domain. Contains 1 EGF-like domain. Contains 1 peptidase M12B domain.
SUBUNIT	Heterodimer with ADAM1/fertilin subunit alpha.
Post-translational modifications	The prodomain and the metalloprotease domain are cleaved during the epididymal maturation of the spermatozoa.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	ADAM-2, also known as PH-30?and Fertilin-? was first described as a sperm-egg fusion protein from guinea pig. A member of the metalloproteinase family containing disintigrin-like domains (ADAMs), the function of ADAM-2 is still poorly understood. Unlike ADAM-1, ADAM-2 does not contain the canonical HExxHxxxxxH zinc metalloproteinase motif, and is not thought to be proteolytically active. Like the other ADAMs, ADAM-2 domain structure consists of a signal sequence followed by a propeptide domain, a metalloproteinase domain, a disintegrin domain cysteine-rich domain, an EGF-like domain, a transmembrane domain, and a cytoplasmic domain. Three isoforms of ADAM-2 are reported to date, which differ in the beginning of the metalloproteinase domain and cysteine-rich domain. The sequences are coded from intronless genes. The longest ADAM-2 message encodes a protein of 735 amino acids, with a predicted mass of 82.5 kDa and a pI of 5.73. The 716 amino acid form of ADAM-2 has a deletion in the start of the metalloproteinase domain, relative to the longer form, and has a predicted mass of 80.2 kDa and pI of 5.75. The shorter form of 579 amino acids shared the deletion in the MP domain, and also has a deletion in the cystein-rich domain. Localized on the surface of sperm, the ADAM-2 isoforms are thought to form a heterodimer with ADAM-1 (fertilin-a), and facilitate sperm-egg fusion, although there is some controversy about the precise actions the proteins play. Integrin a6? on the egg surface is thought to dock with a QDECD motif in the disintegrin domain of ADAM-2, and there is some speculation that ADAM-1/ADAM-2 heterodimewr initiated ADAM-3 production on the cell surface.

Additional Information

Other Names	CRYN1; CRYN2; CT15; FTNB; PH-30b; PH30; PH30-beta; ADAM2_HUMAN; ADAM2; ADAM 2; Cancer/testis antigen 15 (CT15); Fertilin subunit beta; PH-30 (PH30); ADAM metallopeptidase domain 2; fertilin beta; cancer/testis antigen 15
Target/Specificity	Expressed specifically in testis.
Dilution	WB=1:500-2000
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.
Name	ADAM2 Rabbit pAb
Function	Interactions with egg membrane could be mediated via binding between its disintegrin-like domain to one or more integrins receptors on the egg. This is a non catalytic metalloprotease-like protein.

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