

DATA SHEET

PRODUCT NAME: Rabbit Antibody to ADAM-19 (A Disintegrin And Metalloproteinase-19, Meltrin-beta); Amino end active ADAM-19

CATALOG NUMBER: RP3-ADAM-19

LOT#: IF011018

DESCRIPTION: RP3-ADAM-19 is a polyclonal antibody made to the metalloproteinase ADAM-19. The antibody is made to a synthetic peptide based on the amino end of furin-activated human ADAM-19. The antibody has been peptide-affinity purified, concentrated to 1.0 mg/ml, with the addition of 0.05% sodium azide as preservative and 50% glycerol as cryoprotectant.

USE: ADAM-19, also known as Meltrin-beta, was first described in muscle cells as a protein with homology to the fertilins (ADAMs 1, 2). Initial observations indicated a role for ADAM-19 in myoblast fusion, similar to sperm-egg fusion aided by ADAMs 1 and 2. Later works describe ADAM-19 in the bone, muscle, lung, heart, brain, kidney, and a wide range of tissues. The Cytoplasmic domain of ADAM-19, like ADAMs 9, 12 and 15, contains SH3 ligand domains, which are thought to interact with PKC- δ , suggesting specific regulation routes for ADAM-19. Also reported is a sequence of ADAM-19 lacking the transmembrane and cytoplasmic domains, suggesting that a soluble form is produced. A member of the metalloproteinase family containing disintegrin-like domains (ADAMs), the function of ADAM-19 is still poorly understood. ADAM-19 contains the canonical HExxHxxxxxH zinc metalloproteinase motif, and has been shown to be proteolytically active. Other ADAMs family members (ADAM-10, ADAM-17) have been more thoroughly studied, and are known to play key roles in inflammation, growth factor maturation and release, and a wide range of other functions. The full length ADAM-19 sequence codes for a 956 amino acid protein, containing a Type-I transmembrane domain, with a predicted mass of 105 kD. Two shorter sequences have been reported: a 918 amino acid sequence that differs at the carboxyterminal end, and the soluble form, a 538 amino acid version with predicted mass of 59.9 kD. Mouse ADAM-19 sequence is 920 AA, predicted at 100.86 kD. RP3-ADAM-19 recognizes bands of 60 kD and 50 kD in reduced Western blots of cell lysates. A recommended starting concentration for Western blots is 1:1,000 when using colorimetric substrates such as BCIP/NBT, and 1:5,000 for chemiluminescent substrates. Higher concentrations of antibody may be needed for samples from more distantly related species. EDTA/EGTA treatment of tissues or lysates is required to see latent zymogen.

FOR RESEARCH USE ONLY; NOT FOR USE IN HUMANS.

STORAGE: The undiluted antibody solution is stable for approximately 1 year at -20°C.
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