bs-5858R **[Primary Antibody]**

ADAMTS2 Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 9509 **SWISS:** O95450

Target: ADAMTS2

Immunogen: KLH conjugated synthetic peptide derived from human ADAMTS2: 501-600/1211.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: ADAMTS2 is a member of the larger family of ADAMs (A Disintegrin And Metalloproteinase) metalloproteinases containing thrombospondin (TS) repeats. ADAMTS2 (A Disintegrin And Metalloproteinase with ThromboSpondin-2 motif), also known as Procollagen I N-Proteinase (PNP), was first described in calf skin as a proteinase that processes the amino end of Type-I collagen. PNP expression was found in skin, aorta, liver, tendon, bladder, retina, and skeletal muscle. Later, PNP was found to be a member of a larger family of ADAMs metalloproteinases containing thrombospondin (TS) repeats. Full length human ADAMTS2 contains 1211 amino acids (bovine, 1205 amino acids) and has a predicted mass of 134.7 kDa, but glycosylation and the abundance of cysteine residues gives ADAMTS2 a greater apparent molecular weight on reduced SDS-PAGE gels. Purified ADAMTS2 resolves at a lower molecular weight of 107 kDa, due to cleavage at the furin site. ADAMTS2 contains the canonical HexxHxxxxxH zinc metalloproteinase motif, and has been shown to be proteolytically active, cleaving procollagen. In addition to the metalloprotease domain, ADAMTS2 has a propeptide domain, a prohormone convertase (PC, furin) cleavage site, a cysteine-rich domain, and three thrombospondin 1 like domains, followed by a unique C-terminal domain. ADAMTS2 does not have a transmembrane domain, unlike many of the ADAMs proteases, and is a secreted protein, much of which binds to the ECM (extracellular matrix). ADAMTS2 knockout mice develop fragile skin (similar to dermatospaxis), and male infertility. Mutations of the ADAMTS2 gene are responsible for human Ehlers-Danlos syndrome type VII C and bovine dermatosparaxis. ADAMTS2 is involved in collagen biosynthesis and may also play role in development and angiogenesis.

Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
ELISA (1:5000-10000)

Reactivity: (predicted: Human, Mouse, Rat, Pig, Cow, Chicken, Dog)

Predicted MW.: 108 kDa

Subcellular Location: Secreted ,Extracellular matrix