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Anti-TSG6 Antibody

Catalog # ABO10288

Product Information

Application	WB
Primary Accession	P98066
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Tumor necrosis factor-inducible gene 6 protein(TNFAIP6) detection. Tested with WB in Human;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	7130
Other Names	Tumor necrosis factor-inducible gene 6 protein, Hyaluronate-binding protein, TNF-stimulated gene 6 protein, TSG-6, Tumor necrosis factor alpha-induced protein 6, TNF alpha-induced protein 6, TNFAIP6, TSG6
Calculated MW	31203
Application Details	Western blot, 0.1-0.5 □g/ml, Human, Rat
Tissue Specificity	Found in the synovial fluid of patients with rheumatoid arthritis. .
Source	Eukaryota
Protein Name	Tumor necrosis factor-inducible gene 6 protein
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human TSG6 (46-91aa KYKLTYAEAKAVCEFEGGHLATYKQLEAARKIGFHVCAAGWMAKGR), different from the related mouse sequence by two amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

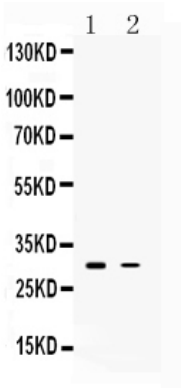
Protein Information

Name	TNFAIP6
Synonyms	TSG6
Function	Major regulator of extracellular matrix organization during tissue remodeling (PubMed:15917224, PubMed:18042364, PubMed:26823460). Catalyzes the transfer of a heavy chain (HC) from inter-alpha-inhibitor (I-alpha-I) complex to hyaluronan. Cleaves the ester bond between the C-terminus of the HC and GalNAc residue of the chondroitin sulfate chain in I-alpha-I complex followed by transesterification of the HC to hyaluronan. In the process, potentiates the antiprotease function of I- alpha-I complex through release of free bikunin (PubMed:15917224, PubMed:16873769, PubMed:20463016). Acts as a catalyst in the formation of hyaluronan-HC oligomers and hyaluronan-rich matrix surrounding the cumulus cell-oocyte complex, a necessary step for oocyte fertilization (PubMed:26468290). Assembles hyaluronan in pericellular matrices that serve as platforms for receptor clustering and signaling. Enables binding of hyaluronan deposited on the surface of macrophages to LYVE1 on lymphatic endothelium and facilitates macrophage extravasation. Alters hyaluronan binding to functionally latent CD44 on vascular endothelium, switching CD44 into an active state that supports leukocyte rolling (PubMed:15060082, PubMed:26823460). Modulates the interaction of chemokines with extracellular matrix components and proteoglycans on endothelial cell surface, likely preventing chemokine gradient formation (PubMed:27044744). In a negative feedback mechanism, may limit excessive neutrophil recruitment at inflammatory sites by antagonizing the association of CXCL8 with glycosaminoglycans on vascular endothelium (PubMed:24501198). Has a role in osteogenesis and bone remodeling. Inhibits BMP2-dependent differentiation of mesenchymal stem cell to osteoblasts (PubMed:16771708, PubMed:18586671). Protects against bone erosion during inflammation by inhibiting TNFSF11/RANKL- dependent osteoclast activation (PubMed:18586671).
Cellular Location	Secreted.
Tissue Location	Expressed in airway epithelium and submucosal gland (at protein level). Colocalizes with bikunin at the ciliary border Present in bronchoalveolar lavage fluid (at protein level) (PubMed:16873769). Expressed in mesenchymal stem cells (PubMed:16771708). Found in the synovial fluid of patients with rheumatoid arthritis.

Background

Tumor necrosis factor-inducible gene 6 protein, also known as TSG-6, is a protein that in humans is encoded by the TNFAIP6 gene. The protein encoded by this gene is a secretory protein that contains a hyaluronan-binding domain, and thus is a member of the hyaluronan-binding protein family. The hyaluronan-binding domain is known to be involved in extracellular matrix stability and cell migration. This protein has been shown to form a stable complex with inter-alpha-inhibitor (I alpha I), and thus enhance the serine protease inhibitory activity of I alpha I, which is important in the protease network associated with inflammation. This gene can be induced by proinflammatory cytokines such as tumor necrosis factor alpha and interleukin-1. Enhanced levels of this protein are found in the synovial fluid of patients with osteoarthritis and rheumatoid arthritis.

Images



Western blot analysis of TSG6 expression in rat brain extract (lane 1) and HELA whole cell lysates (lane 2). TSG6 at 31KD was detected using rabbit anti- TSG6 Antigen Affinity purified polyclonal antibody (Catalog #ABO10288) at 0.5 □¼g/mL. The blot was developed using chemiluminescence (ECL) method .

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