

Anti-TSG6 Antibody

Catalog # AP53707

Product Information

Application WB Primary Accession P98066

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 31203

Additional Information

Gene ID 7130

Other Names TSG6; 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

Target/Specificity Recognizes endogenous levels of TSG6 protein.

Dilution WB~~1/500 - 1/1000

Format Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

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.

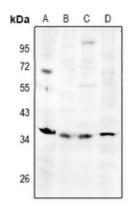
Tissue Location

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.

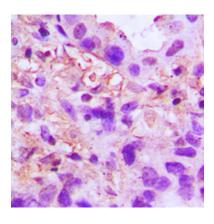
Background

Rabbit polyclonal antibody to TSG6

Images



Western blot analysis of TSG6 expression in HEK293T (A), mouse kidney (B), rat kidney (C), PC3 (D) whole cell lysates.



Immunohistochemical analysis of TSG6 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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