

DESCRIPTION

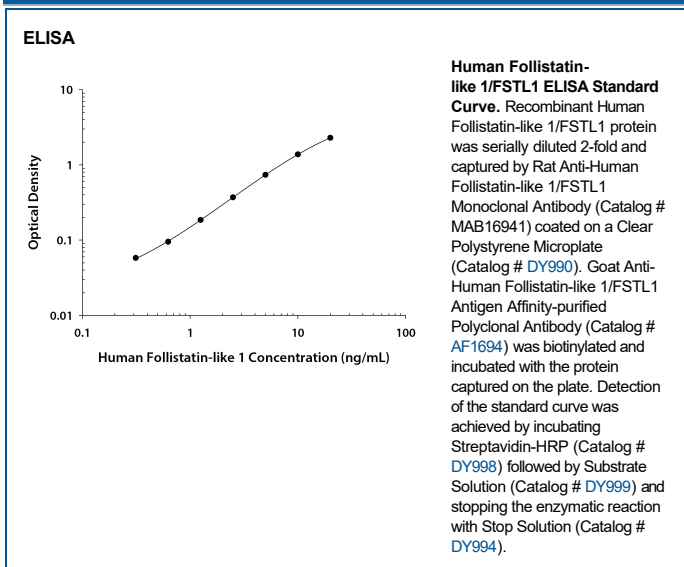
Species Reactivity	Human
Specificity	Detects human Follistatin-like 1/FSTL1 in direct ELISAs.
Source	Recombinant Monoclonal Rat IgG _{2B} Clone # 229001R
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Follistatin-like 1/FSTL1 Met1-Ile308 Accession # Q12841
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

ELISA	This antibody functions as an ELISA capture antibody when paired with Goat Anti-Human Follistatin-like 1/FSTL1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1694). <i>This product is intended for assay development on various assay platforms requiring antibody pairs. We recommend the Human Follistatin-like 1 DuoSet ELISA Kit (Catalog # DY1694) for convenient development of a sandwich ELISA.</i>
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DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Follistatin-like 1 (FSL1 or FSTL1), also known as FRP (follistatin-related protein), Fliik (follistatin-like), and TSC-36 (TGF- β 1-stimulated clone 36), is a secreted 45-55 kDa extracellular glycoprotein belonging to the BM-40/SPARC/Osteonectin family (1-3). The human FSTL1 cDNA encodes 308 amino acids (aa), including a 20 aa signal sequence, a cysteine-rich Follistatin (EGF- and kazal-like) domain, two apparently non-functional EF-hand calcium-binding motifs, and a von Willebrand Factor C homology domain (1, 3). Mature human FSTL1 shares 94%, 95%, 98% and 99% aa identity with mouse, rat, bovine and equine FSTL1, respectively. FSTL1 was first identified as a TGF- β -induced protein from a mouse osteoblast cell line (4). It is ubiquitously expressed in early mouse development, but is mainly mesenchymal later in development (5). In humans, FSTL1 is a common rheumatoid arthritis auto-antigen (2). It is reported to be either pro-inflammatory due to promoting inflammatory cytokine secretion, or to prevent autoimmune arthritis by inhibiting matrix metalloproteinase (MMP) and prostaglandin expression (6-9). In muscle and heart, it appears to be protective and promotes endothelial cell functions such as revascularization after ischemia, probably due to promoting expression and activation of the protein kinase AKT1 (10, 11). Cardiac and circulating FSTL1 is generally increased in conditions such as heart failure and acute coronary syndrome (11, 12). FSTL1 also appears to be a tumor suppressor, showing down-regulated expression in many human cancers (4, 14, 15). *In vitro*, it slows proliferation and MMP-dependent migration, and increases FAS-dependent apoptosis of tumor cell lines (14).

References:

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