Recombinant Human SSc5D His-tag

Catalog Number: 10535-SS

DESCRIPTION

Source	Human embryonic kidney cell, HEK293-derived human SSc5D protein Val17-Thr875, with a C-terminal 6-His tag Accession # NP_001138422.1
N-terminal Sequence Analysis	Val17
Predicted Molecular Mass	92 kDa

SPECIFICATIONS

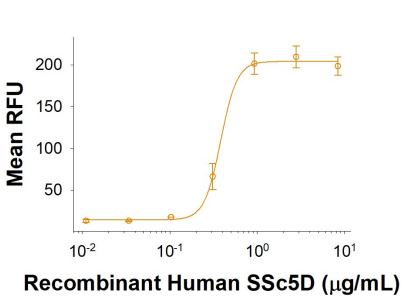
SDS-PAGE	135-153 kDa, under reducing conditions
Activity	Measured by its ability to bind fluorescein-conjugated *E. coli* Bioparticles. The ED_{50} for this effect is 0.2-1 µg/mL.
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 500 µg/mL in PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 3 months, -20 to -70 °C under sterile conditions after reconstitution.

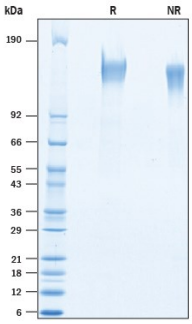
DATA

Binding Activity



Recombinant Human SSc5D His-tag (Catalog # 10535-SS) binds fluorescein-conjugated *E. coli* bioparticles. The ED_{50} for this effect is 0.2-1 µg/mL.

SDS-PAGE



2 µg/lane of Recombinant Human SSc5D His-tag Protein (Catalog # 10535-SS) was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining, showing bands 120-155 at kDa.

BACKGROUND

SSc5D (Soluble Scavenger with 5 Domains) is a member of scavenger receptor cysteine-rich (SRCR) superfamily that comprises a group of proteins with one or more domains sharing structural homology with the membrane distal extracellular domain of the macrophage type I scavenger receptor (1). Mature human SSc5D consists of 1573 amino acids (aa), including five SRCR domains at the N-terminus and a heavily glycosylated, mucin-like domain at the C-terminus. Within N-terminal SRCR domains, human SSc5D shares 95% and 96% aa sequence identity with mouse and rat SSc5D, respectively (1). SSc5D is produced by monocyte/macrophages, T cells and several epithelial cells from placenta, spleen, and colon (1). Many members of the SRCR super family bind to and clear bacteria, fungi or viruses from infected host (2). SSc5D physically interacts with whole bacteria cells especially to E. coli strains. These findings can help fight bacterial infections by discriminating between different bacteria strains and species (3).

References:

1. Goncalves, C.M. *et al.* (2009) Mol. Immunol. **46**:2585.
2. Martinez, V.G. *et al.* (2011) Pharmacol. Rev. **63**:967.
3. Bessa Pereira, C. *et al.* (2016) Front. Immunol. **7**:416.

Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 **Canada** TEL 855 668 8722 **China** TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449