

DESCRIPTION

Source	Chinese Hamster Ovary cell line, CHO-derived Ala20-Leu470, with an N-terminal c-Myc tag Accession # Q8NI99
N-terminal Sequence Analysis	Glu (c-Myc tag)
Structure / Form	Disulfide-linked homo-oligomer
Predicted Molecular Mass	51 kDa

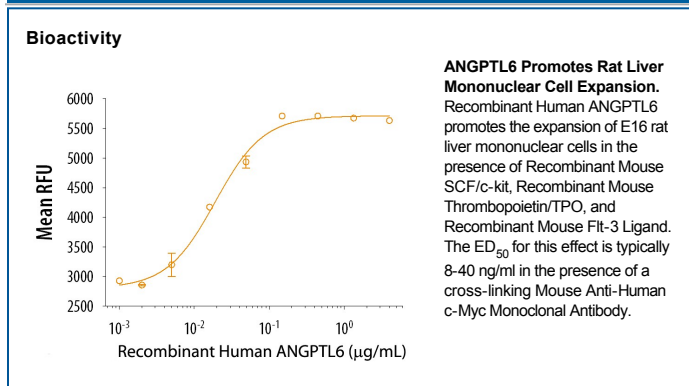
SPECIFICATIONS

SDS-PAGE	58-69 kDa and 31-41 kDa, reducing conditions
Activity	Measured by its ability to promote the expansion of E16 rat liver mononuclear cells <i>in vitro</i> , in the presence of Recombinant Mouse SCF/c-kit Ligand (Catalog # 455-MC), Recombinant Mouse Thrombopoietin/Tpo (Catalog # 488-TO), and Recombinant Mouse Flt-3 Ligand (Catalog # 427-FL). The ED ₅₀ for this effect is typically 8-40 ng/mL in the presence of a cross-linking Mouse Anti-Human c-Myc Monoclonal Antibody (Catalog # MAB3696).
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>90%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Formulation	Lyophilized from a 0.2 µm filtered solution in Tris, NaCl and CHAPS with BSA as a carrier protein. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 100 µg/mL in PBS containing at least 0.1% human or bovine serum albumin.
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. <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. ● 3 months, -20 to -70 °C under sterile conditions after reconstitution.

DATA



BACKGROUND

Angiopoietin-like Protein 6 (ANGPTL6), also known as angiopoietin-related growth factor (AGF), is a secreted 50 kDa protein that contains a coiled-coil domain and a fibrinogen-like domain (1, 2). Mature human ANGPTL6 shares 75% sequence identity with both mouse and rat ANGPTL6. ANGPTL6 is highly expressed in hepatocytes and is detectable in serum (1, 2). Within the liver, secreted ANGPTL6 inhibits gluconeogenesis and promotes insulin sensitivity and energy expenditure (3, 4). Circulating ANGPTL6 promotes the chemotaxis of vascular endothelial cells resulting in increased vascular permeability and angiogenesis (5, 6). An integrin-binding RGD motif located within the fibrinogen-like domain of ANGPTL6, enables it to promote skin wound healing by mediating the adhesion and migration of keratinocytes, fibroblasts, and endothelial cells (5, 7). Elevated levels of ANGPTL6 in serum are associated with metabolic syndrome, diabetes, and pre-eclampsia (8-11). Serum ANGPTL6 levels are also elevated during obesity (4, 12). ANGPTL6 is reported to promote the survival and expansion of hematopoietic stem cells (13). ANGPTL6 is produced by several hematopoietic cell types including megakaryocytes, platelets, mast cells, and uterine NK cells (7).

References:

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