Recombinant Human IL-17B

Catalog Number: 8129-IL

DESCRIPTION

Source	Chinese Hamster Ovary cell line, CHO-derived Gln21-Phe180 Accession # Q9UHF5
N-terminal Sequence Analysis	Gln21, Ser51 & Gly102 Gln21 predicted, sequencing might be blocked
Structure / Form	Noncovalently-linked homodimer
Predicted Molecular Mass	18 kDa (monomer)

SPECIFICATIONS

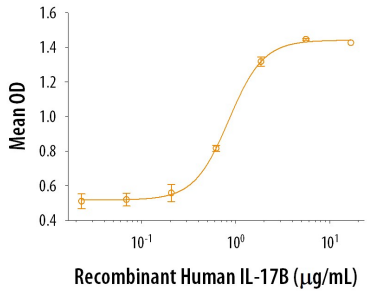
SDS-PAGE	20-25 kDa, reducing conditions
Activity	Measured by its ability to induce IL-8 secretion by HepG2 human hepatocellular carcinoma cells. Tang, Y. *et al.* (2011) Clin. Exp. Immunol. **166**:281. The ED_{50} for this effect is typically 0.4-2 µg/mL.
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE under reducing conditions and visualized by silver stain.
Formulation	Lyophilized from a 0.2 µm filtered solution in Sodium Phosphate and NaCl 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.** ● 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

Bioactivity



IL-17B-induced IL-8 Secretion. Recombinant Human IL-17B induces IL-8 secretion by HepG2 human hepatocellular carcinoma cells.

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BACKGROUND

Interleukin-17B (IL-17B), is an approximately 20 kDa glycosylated cytokine that plays a role in inflammation and bone growth. The six IL-17 cytokines (IL-17A-F) are encoded by separate genes but adopt a conserved cystine knot fold (1, 2). Mature human IL-17B shares 90% and 91% amino acid sequence identity with mouse and rat IL-17B, respectively (3, 4). IL-17B binds to IL-17 RB and induces the production of inflammatory cytokines and the infiltration of inflammatory immune cells (3, 4). IL-17B is expressed in the central nervous system, testis, ovary, stomach, pancreas, and small intestine (3-5). In the skeletal system, IL-17B is expressed in bone collars surrounding primary ossification centers as well as in epiphyseal plate chondrocytes during development and after bone fracture (6, 7). IL-17B is up-regulated in arthritic cartilage where it exacerbates the severity of disease (8). It is also up-regulated in aggressive breast cancer cell lines, and its exaggerated signaling through IL-17 RB promotes tumorigenicity (9). It inhibits the adhesion of vascular endothelial cells to Matrigel and enhances their migration (10).

References:

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