Recombinant Human IGF-1/IGF1 Protein (aa 52-118)

Catalog Number: PKSH032595



Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

Synonyms Insulin-Like Growth Factor I;IGF-I;Mechano Growth Factor;MGF;Somatomedin-

C:IGF1:IBP1

Species Human
Expression Host E.coli

Sequence Thr52-Ala118

AccessionP05019Calculated Molecular Weight7.3 kDaObserved molecular weight9 kDaTagNone

Bioactivity Measured in a serum-free cell proliferation assay using MCF-7 human breast cancer

cells. The ED_{50} for this effect is 20-100 ng/ml.

Properties

Purity > 95 % as determined by reducing SDS-PAGE.

Endotoxin < 0.5 EU per μg of the protein as determined by the LAL method.

Storage Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to

-80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots

of reconstituted samples are stable at < -20°C for 3 months.

Shipping This product is provided as lyophilized powder which is shipped with ice packs.

Formulation Lyophilized from a 0.2 µm filtered solution of 20mM NaAc-HAc, pH 4.5

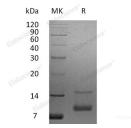
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as

protectants before lyophilization.

Please refer to the specific buffer information in the printed manual.

Reconstitution Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Insulin-like growth factor I (IGF1) belongs to the family of insulin-like growth factors that are structurally homologous to proinsulin. Mature IGFs are generated by proteolytic processing of inactive precursor protein containing N-terminal and C-terminal propeptide regions. Mature human IGF-I consisting of 70 amino acids with 94% identity with mouse IGF1 and exhibits cross-species activity. IGF1 binds IGF-1R; IGF-2R; and the insulin receptor and plays a key role in cell cycle progression; cell proliferation and tumor progression. IGF1 expression is regulated by growth hormone.

For Research Use Only

A Reliable Research Partner in Life Science and Medicine

Toll-free: 1-888-852-8623 Tel: 1-832-243-6086 Fax: 1-832-243-6017

Web: <u>www.elabscience.com</u> Email: <u>techsupport@elabscience.com</u>