abcam

Product datasheet

Recombinant human Growth Hormone protein ab110680

Description

Product name	Recombinant human Growth Hormone protein
Biological activity	Activity: 3Units/mg
Purity	> 98 % SDS-PAGE. Purified by chromatographic techniques (RP-HPLC).
Expression system	Escherichia coli
Accession	P01241
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Predicted molecular weight	22 kDa
Amino acids	27 to 217

Specifications

Our **Abpromise guarantee** covers the use of **ab110680** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE
Form	Lyophilized
Additional notes	Centrifuge before opening to ensure complete recovery of vial contents. OD280nm, $E^{0.1\%}$ = 0.72

Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at -20°C. Avoid freeze / thaw cycle. For long term storage it is recommended to add a carrier protein on reconstitution (0.1% HSA or BSA). Reconstitute for long term storage. Constituents: PBS, Mannitol This product is an active protein and may elicit a biological response in vivo, handle with caution.
Reconstitution	Reconstitute using sterile deionized water to a concentration >100ug/ml. Further dilutions can be

made in other aqueous buffers.

General Info

Function	Plays an important role in growth control. Its major role in stimulating body growth is to stimulate the liver and other tissues to secrete IGF-1. It stimulates both the differentiation and proliferation of myoblasts. It also stimulates amino acid uptake and protein synthesis in muscle and other tissues.
Involvement in disease	Defects in GH1 are a cause of growth hormone deficiency isolated type 1A (IGHD1A) [MIM:262400]; also known as pituitary dwarfism I. IGHD1A is an autosomal recessive deficiency of GH which causes short stature. IGHD1A patients have an absence of GH with severe dwarfism and often develop anti-GH antibodies when given exogenous GH. Defects in GH1 are a cause of growth hormone deficiency isolated type 1B (IGHD1B) [MIM:612781]; also known as dwarfism of Sindh. IGHD1B is an autosomal recessive deficiency of GH which causes short stature. IGHD1B patients have low but detectable levels of GH. Dwarfism is less severe than in IGHD1A and patients usually respond well to exogenous GH. Defects in GH1 are the cause of Kowarski syndrome (KWKS) [MIM:262650]; also known as pituitary dwarfism VI. Defects in GH1 are a cause of growth hormone deficiency isolated type 2 (IGHD2) [MIM:173100]. IGHD2 is an autosomal dominant deficiency of GH which causes short stature. Clinical severity is variable. Patients have a positive response and immunologic tolerance to growth hormone therapy.
Sequence similarities	Belongs to the somatotropin/prolactin family.
Cellular localization	Secreted.

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