Active Recombinant Human GH1 protein, His-tagged

Cat. No. GH1-782H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Human GH1 protein(P01241)(28~217 aa), fused with N-terminal His tag, was expressed in E.coli.
Species	Human
Source	E.coli
ProteinLength	28-217 aa
Form	Lyophilized from sterile PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Bio-activity	Growth Hormone (GH), also known as somatotropin, is a member of a family of growth factors. Human growth hormone is a 191 amino acid single-chain polypeptide produced via the anterior pituitary of the brain in the acidophilic, somatotrophic cells. Its production is tightly regulated through several complex feedback mechanisms in response to stress, exercise, nutrition, sleep, and growth hormone itself. Annexin A2 (ANXA2) has been shown to play multiple roles in growth, development, metabolism and ANXA2 is a high affinity receptor for GH. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human GH and recombinant human ANXA2. Briefly, GH was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to ANXA2-coated microtiter wells and incubated for 1h at 37°C. Wells were washed with PBST and incubated for 1h with anti-GH pAb, then aspirated and washed 3 times. After incubation with HRP

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	labelled secondary antibody for 1h at 37°C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 µstop solution to the wells and read at 450/630 nm immediately. The binding activity of recombinant human GH and recombinant human ANXA2 was shown, the EC50 for this effect is 2.1 ug/mL.
Molecular Mass	25.7kDa
Endotoxin	<1.0EU per 1µg (determined by the LAL method).
Purity	> 90% as determined by SDS-PAGE.
Storage	Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.
Reconstitution	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	GH1 growth hormone 1 [Homo sapiens]
Official Symbol	GH1
Synonyms	GH1; growth hormone 1; somatotropin; GH; GH N; GHN; hGH N; pituitary growth hormone; GH-N; hGH-N; IGHD1B;
Gene ID	2688
mRNA Refseq	NM_000515

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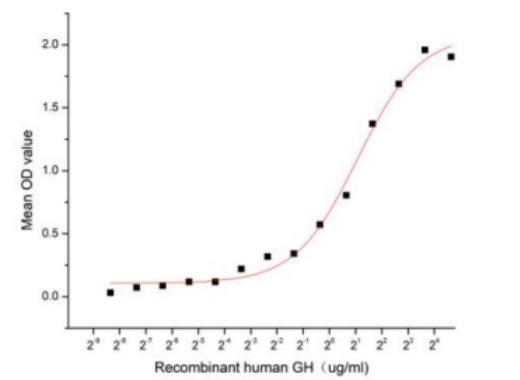
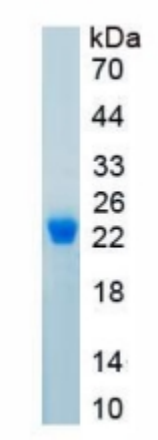
Protein Refseq	NP_000506
MIM	139250
UniProt ID	P01241
Activity	
SDS-PAGE	

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