

Growth Hormone (GH) Active Protein | GH active protein

Active Growth Hormone (GH)

CATALOG # AAA161667	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Growth Hormone (GH); Active Growth Hormone (GH); Growth Hormone; GH1; GH-N; GHN; hGH-N; Somatotropin; Hygetropin; Jintropin; Kigtropin; Pituitary Growth Hormone; Normal4; GH active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 90% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Pro28~Phe2 17
Applicable Applications for GH active protein	Activity Assay, Cell Culture
Species	Human
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	6.4
Research Area	Endocrinology, Neuro science, Hormone metabolism
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months

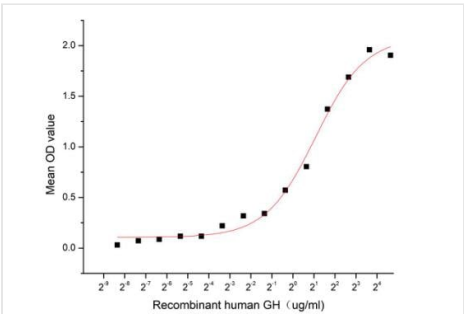


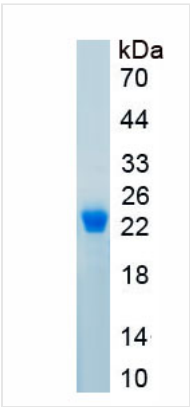
Figure 1. The binding activity of recombinant human GH and recombinant human ANXA2

Bioactivity

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 ul were then transferred to ANXA2-coated microtiter wells and incubated for 1h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-GH pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37 degree C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50 ul stop solution to the wells and read at 450/630 nm immediately. The binding activity of recombinant human GH and recombinant human ANXA2 was shown in Figure 1, the EC50 for this effect is 2.1 ug/mL.

SDS-PAGE

Figure. SDS-PAGE



ADDITIONAL INFORMATION

Product Categories/Family for GH active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	134703
NCBI GeneID	2688
UniProt Accession #	P01241; Q14405; Q16631; Q5EB53; Q9HBZ1; Q9UMJ7; Q9UNL5; A6NEF6
Molecular Weight	217
NCBI Official Full Name	Somatotropin
NCBI Official Synonym Full Names	growth hormone 1
NCBI Official Symbol	GH1
NCBI Official Synonym Symbols	GH; GHN; GH-N; hGH-N; IGHD1B
NCBI Protein Information	somatotropin; pituitary growth hormone
UniProt Protein Name	Somatotropin
UniProt Gene Name	GH1
UniProt Synonym Gene Names	GH; GH-N
UniProt Entry Name	SOMA_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-active-protein/growth-hormone-gh/161667>