

Product datasheet

Anti-Growth Hormone antibody [GH/1371] ab218404

[3 Images](#)

Overview

Product name	Anti-Growth Hormone antibody [GH/1371]
Description	Mouse monoclonal [GH/1371] to Growth Hormone
Host species	Mouse
Tested applications	Suitable for: Protein Array, IHC-P
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment within Human Growth Hormone aa 58-187. The exact sequence is proprietary. Database link: P01241
Positive control	Human pituitary tissue.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.05% Sodium azide Constituents: 99% PBS, 0.05% BSA
Purity	Protein A/G purified
Purification notes	ab218404 is purified from Bioreactor Concentrate by Protein A/G.
Clonality	Monoclonal
Clone number	GH/1371
Isotype	IgG2b

Light chain type

kappa

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab218404 in the following tested applications.

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

Application	Abreviews	Notes
Protein Array		Use at an assay dependent concentration.
IHC-P		Use a concentration of 1 - 2 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

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.

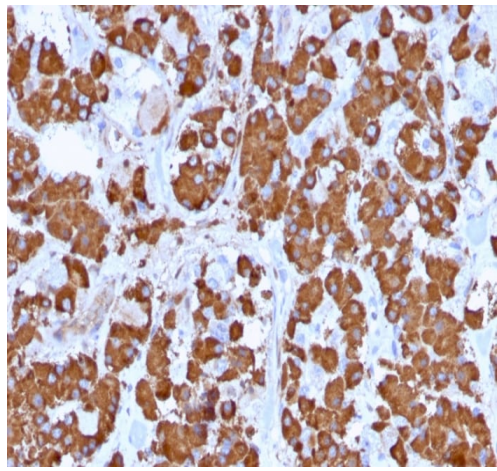
Sequence similarities

Belongs to the somatotropin/prolactin family.

Cellular localization

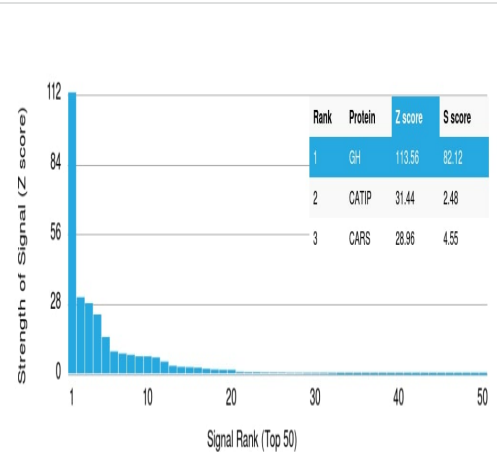
Secreted.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Growth Hormone antibody [GH/1371] (ab218404)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human pituitary tissue labelling growth hormone with ab218404 at 2µg/ml dilution. Heat mediated antigen retrieval performed with tris/EDTA buffer pH 9 before commencing with IHC staining protocol.

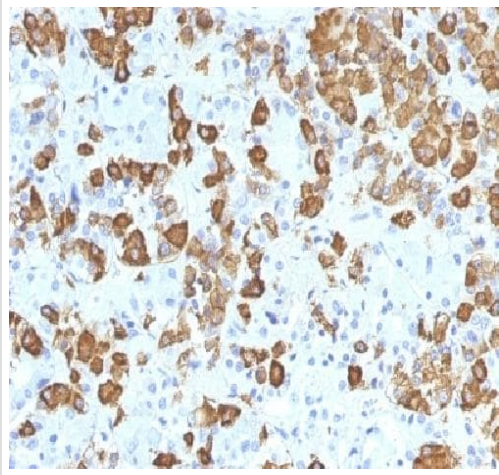


Protein Array - Anti-Growth Hormone antibody [GH/1371] (ab218404)

ab218404 was tested in protein array against over 19000 different full-length human proteins.

Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target.

A MAb is specific to its intended target if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



Immunohistochemical analysis of formalin-fixed, paraffin-embedded human pituitary tissue labeling Growth Hormone with ab218404 at 1 $\mu\text{g/ml}$.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Growth Hormone antibody [GH/1371] (ab218404)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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