

Product datasheet

Anti-Growth Hormone antibody [GH-45] ab7905

3 References 1 Image

Overview

Product name	Anti-Growth Hormone antibody [GH-45]
Description	Mouse monoclonal [GH-45] to Growth Hormone
Specificity	Specifically reacts with human growth hormone with affinity constant 3.8×10^{10} l/mol. It does not bind human prolactin or any other pituitary hormones.
Tested applications	Suitable for: ICC, IHC-P
Species reactivity	Reacts with: Human
Immunogen	Full length native protein (purified) (Human).

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 or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 15mM Sodium Azide Constituents: PBS, pH 7.4
Purity	Protein A purified
Purification notes	Purified from ascites using protein A-affinity chromatography Purity >95 % (by PAGE).
Clonality	Monoclonal
Clone number	GH-45
Isotype	IgG1

Applications

Our [Abpromise guarantee](#) covers the use of **ab7905** 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
ICC		
IHC-P		

Application notes

ICC: Use at an assay dependant dilution.

IHC-P: Use at an assay dependant concentration.

Not tested in other applications.

Optimal dilutions/concentrations should be determined by the end user.

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.

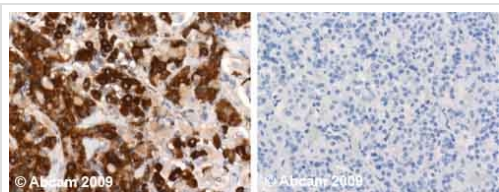
Sequence similarities

Belongs to the somatotropin/prolactin family.

Cellular localization

Secreted.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Human Growth Hormone antibody [GH-45] (ab7905)

Human normal brain (pituitary gland). Staining is observed in the cytoplasm and in the extracellular space. Left panel: with primary antibody at 1 ug/ml. Right panel: isotype control. Sections were stained using an automated system DAKO Autostainer Plus , at room temperature: sections were rehydrated and antigen retrieved with the Dako 3 in 1 AR buffers citrate pH6.1 in a DAKO PT Link. Slides were peroxidase blocked in 3% H₂O₂ in methanol for 10 mins. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 min and detected with Dako envision flex amplification kit for mouse for 30 minutes. Colorimetric detection was completed with Diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX. Please note that for manual staining we recommend to optimize the primary antibody concentration and incubation time (overnight incubation), and amplification may be required.

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