abcam

Product datasheet

Anti-GDF6 antibody ab226853

2 Images

Overview

Product name Anti-GDF6 antibody

Description Rabbit polyclonal to GDF6

Host species Rabbit

Tested applications Suitable for: WB, IHC-P Species reactivity

Reacts with: Rat, Human

Predicted to work with: Mouse, Cow

Immunogen Recombinant fragment within Human GDF6 (internal sequence). The exact sequence is

proprietary.

Database link: Q6KF10

Positive control IHC-P: Rat brain tissue. WB: U-87 MG whole cell extract.

General notes 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.

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

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: 7.00

Preservative: 0.025% Proclin 300

Constituents: 79% PBS, 20% Glycerol (glycerin, glycerine)

Purity Immunogen affinity purified

Clonality Polyclonal

Isotype ΙgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab226853 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
WB		1/500 - 1/3000. Predicted molecular weight: 51 kDa.
IHC-P		1/100 - 1/1000.

Target

Function

Growth factor that controls proliferation and cellular differentiation in the retina and bone formation. Plays a key role in regulating apoptosis during retinal development. Establishes dorsal-ventral positional information in the retina and controls the formation of the retinotectal map (PubMed:23307924). Required for normal formation of bones and joints in the limbs, skull, digits and axial skeleton. Plays a key role in establishing boundaries between skeletal elements during development. Regulation of GDF6 expression seems to be a mechanism for evolving species-specific changes in skeletal strucutres. Seems to positively regulates differentiation of chondrogenic tissue through the growth factor receptors subunits BMPR1A, BMPR1B, BMPR2 and ACVR2A, leading to the activation of SMAD1-SMAD5-SMAD8 complex. The regulation of chondrogenic differentiation is inhibited by NOG (PubMed:26643732). Also involved in the induction of adipogenesis from mesenchymal stem cells. This mechanism acts through the growth factor receptors subunits BMPR1A, BMPR2 and ACVR2A and the activation of SMAD1-SMAD5-SMAD8 complex and MAPK14/p38.

Involvement in disease

Klippel-Feil syndrome 1, autosomal dominant

A chromosomal aberration involving GDF6 has been found in a patient with Klippel-Feil syndrome

(KFS). Paracentric inv(8)(q22;2q23.3).

Microphthalmia, isolated, 4

Leber congenital amaurosis 17

Defects in POP1 may be the cause of multiple synostoses syndrome (SYNS). SYNS is a bone disease characterized by multiple progressive joint fusions that commonly involve proximal interphalangeal, tarsal-carpal joints. Additional features can include progressive conductive

deafness.

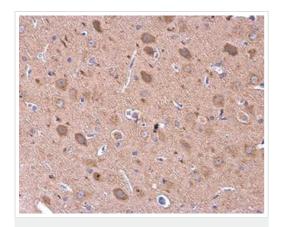
Sequence similarities

Belongs to the TGF-beta family.

Cellular localization

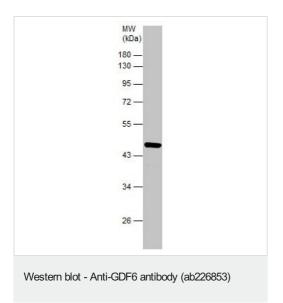
Secreted.

Images



Paraffin-embedded rat brain tissue stained for GDF6 using ab226853 at 1/500 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-GDF6 antibody (ab226853)



Anti-GDF6 antibody (ab226853) at 1/2000 dilution + U-87 MG (human glioblastoma-astrocytoma epithelial cell line) whole cell extract at 30 μg

Predicted band size: 51 kDa

10% SDS-PAGE gel.

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

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