# abcam

# Product datasheet

# Anti-GFR alpha 3/GFRA3 antibody ab8028

★★★★★ 1 Abreviews 9 References 3 Images

#### Overview

Product name Anti-GFR alpha 3/GFRA3 antibody

**Description** Rabbit polyclonal to GFR alpha 3/GFRA3

Host species Rabbit

Tested applications Suitable for: IHC-P, WB

Species reactivity Reacts with: Mouse

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

(Peptide available as ab6100)

General notes Members of the glial cell line-derived neurotrophic factor(GDNF) family including GDNF and

neurturin (NTN) play essential roles in the control of vertebrate neuron survival and differentiation.

A new member of the GDNF family was recently identified and designated persephin.

Physiological responses to these neurotrophic factors require two receptor subunits, the novel glycosylphosphadidylinositol linked protein GFRa and Ret receptor tyrosine kinase GFRb. Following the findings of GFRa-1 and -2, a novel receptor in GFRa family was identified very recently from human and mouse and designated GFRa-3. GFRa-3 binds persephin, thus, persephin, GFRa-3, and Ret PTK form a complex to transduce persephin signal and to mediate

persephin function.

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.

Storage buffer pH: 7.2

Preservative: 0.02% Sodium azide

**Purity** DEAE-Chromatography

1

#### Primary antibody notes

Members of the glial cell line-derived neurotrophic factor(GDNF) family including GDNF and neurturin (NTN) play essential roles in the control of vertebrate neuron survival and differentiation. A new member of the GDNF family was recently identified and designated persephin. Physiological responses to these neurotrophic factors require two receptor subunits, the novel glycosylphosphadidylinositol linked protein GFRa and Ret receptor tyrosine kinase GFRb. Following the findings of GFRa-1 and -2, a novel receptor in GFRa family was identified very recently from human and mouse and designated GFRa-3. GFRa-3 binds persephin, thus, persephin, GFRa-3, and Ret PTK form a complex to transduce persephin signal and to mediate persephin function.

**Clonality** Polyclonal

**Isotype** IgG

#### **Applications**

**Images** 

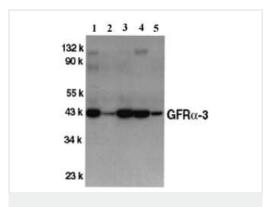
## The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab8028 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
IHC-P		Use a concentration of 10 µg/ml.
WB		1/500 - 1/1000. Predicted molecular weight: 43 kDa.Can be blocked with <b>GFR alpha 3/GFRA3 peptide (ab6100)</b> .

Target		
Function	Receptor for the glial cell line-derived neurotrophic factor, ARTN (artemin). Mediates the artemin-induced autophosphorylation and activation of the RET receptor tyrosine kinase.	
Tissue specificity	Widely expressed in adult and fetus which exhibit a similar pattern. Essentially not expressed in the central nervous system, but highly expressed in several sensory and sympathetic ganglia of the peripheral nervous system. Moderate expression in many non-neuronal tissues, particularly those of the digestive and urogenital systems, but high expression in stomach and appendix. Several types of glandular tissues show low expression. Very low or no expression detected in the hematopoietic system.	
Sequence similarities	Belongs to the GDNFR family.	
Post-translational modifications	N-glycosylated.	
Cellular localization	Cell membrane.	



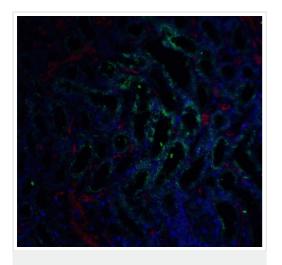
Western blot - Anti-GFR alpha 3/GFRA3 antibody (ab8028)

**All lanes :** Anti-GFR alpha 3/GFRA3 antibody (ab8028) at 1/500 dilution

Lane 1 : Crude cell membrane fractions of murine heart
Lane 2 : Crude cell membrane fractions of murine spleen
Lane 3 : Crude cell membrane fractions of murine kidney
Lane 4 : Crude cell membrane fractions of murine liver
Lane 5 : Crude cell membrane fractions of murine brain

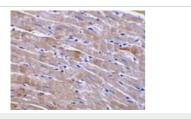
**Predicted band size:** 43 kDa **Observed band size:** 43 kDa

Western blot analysis of GFR alpha 3/GFRA3 in crude cell membrane fractions of murine heart (H), spleen (S), kidney (K), liver (L), and brain (B), respectively, with ab8028 at 1/500 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-GFR alpha 3/GFRA3 antibody (ab8028)

Immunohistochemistry (Formalin-fixed paraffin embedded sections) of mouse kidney tissue labeling GFR alpha 3/GFRA3 with Anti-GFR alpha 3/GFRA3 antibody (ab8028) at  $5\mu g/ml$ .



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-GFR alpha 3/GFRA3 antibody (ab8028)

ab8028 at  $10\mu g/ml$  staining GFR alpha 3/GFRA3 in mouse heart tissue by IHC-P.

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

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