# abcam

### Product datasheet

# Anti-Metabotropic Glutamate Receptor 4/MGLUR4 antibody ab53088

\*\*\* \* \* 18 Abreviews 10 References 3 Images

#### Overview

Product name Anti-Metabotropic Glutamate Receptor 4/MGLUR4 antibody

**Description**Rabbit polyclonal to Metabotropic Glutamate Receptor 4/MGLUR4

Host species Rabbit

Tested applications

Suitable for: ELISA, IHC-Fr, ICC/IF, IHC-P, WB

Species reactivity

Reacts with: Mouse, Rat, Chicken, Cat, Human

Immunogen Synthetic peptide corresponding to Human Metabotropic Glutamate Receptor 4/MGLUR4 (C

terminal).

Database link: Q14833

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 -20°C. Stable for 12 months at -20°C.

**Storage buffer** pH: 7.40

Preservative: 0.02% Sodium azide

 $Constituents: 0.87\% \ Sodium \ chloride, 50\% \ Glycerol \ (glycerin, glycerine), PBS$ 

Without Mg+2 and Ca+2

**Purity** Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

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#### **Applications**

#### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab53088 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		
ELISA		Use at an assay dependent concentration.		
IHC-Fr	<b>★★★★★ (5)</b>	Use at an assay dependent concentration.		
ICC/IF		Use a concentration of 5 µg/ml.		
IHC-P	<b>★★★★★</b> (4)	Use a concentration of 2 $\mu$ g/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.		
WB	★★★★☆ (3)	1/500 - 1/1000. Detects a band of approximately 102 kDa (predicted molecular weight: 102 kDa).		

#### **Target**

Function	Receptor for glutamate.	The activity of this recei	ptor is mediated by	a G-protein that inhibits

adenylate cyclase activity.

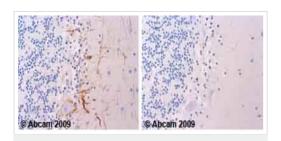
Tissue specificity Strongly expressed in the cerebellum. Expressed at low levels in hippocampus, hypothalamus and

thalamus. No expression detected in liver.

**Sequence similarities**Belongs to the G-protein coupled receptor 3 family.

**Cellular localization** Cell membrane.

#### **Images**



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Metabotropic Glutamate Receptor 4/MGLUR4 antibody (ab53088)

Ab53088 staining Human cerebellum. Staining is localised to the cell membrane.

Left panel: with primary antibody at 2 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 antigen retrieval buffer EDTA pH 9.0 in a DAKO PT Link. Slides were peroxidase blocked in 3% H2O2 in methanol for 10 minutes. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 minutes and detected with Dako Envision Flex amplification kit 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.

1 2 -117 -85 -49 -34 -25 (kD)

Forskolin + + Peptide - +

Western blot - Anti-Metabotropic Glutamate

**All lanes :** Anti-Metabotropic Glutamate Receptor 4/MGLUR4 antibody (ab53088) at 1/500 dilution

Lane 1: 293 cell extracts, treated with Forskolin (40nM, 30mins)

Lane 2: 293 cell extracts, treated

with Forskolin (40nM, 30mins) with peptide

Predicted band size: 102 kDa Observed band size: 102 kDa

Immunocytochemistry/ Immunofluorescence - Anti-Metabotropic Glutamate Receptor 4/MGLUR4 antibody (ab53088)

Receptor 4/MGLUR4 antibody (ab53088)

ICC/IF image of ab53088 stained HepG2 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab53088, 5 $\mu$ g/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit lgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43 $\mu$ M.

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

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