# abcam

# Product datasheet

# Anti-ANTXR2/CMG-2 antibody [EPR7717] ab129004



\* ★ ★ ★ ★ **2** Abreviews **1** References 6 Images

#### Overview

Product name Anti-ANTXR2/CMG-2 antibody [EPR7717]

**Description** Rabbit monoclonal [EPR7717] to ANTXR2/CMG-2

Host species Rabbit

**Specificity** The mouse recommendation is based on the WB results. We do not guarantee IHC for mouse.

**Tested applications** Suitable for: WB, IHC-P, ICC/IF

Unsuitable for: Flow Cyt or IP

Species reactivity Reacts with: Mouse, Human

**Immunogen** Synthetic peptide within Human ANTXR2/CMG-2 aa 400-500. The exact sequence is proprietary.

**Positive control** WB: Human fetal heart, ECV304 and PC3 lysates, Mouse brain and heart lysate; IHC-P: Human

colon tissue; ICC/IF: PC3 cells.

**General notes**This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

Improved sensitivity and specificityLong-term security of supply

- Animal-free production

For more information see here.

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**<sup>®</sup> **patents**.

#### **Properties**

Form Liquid

Storage instructions Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

**Storage buffer** pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

supernatant

Purity Protein A purified

**Clonality** Monoclonal

1

Clone number EPR7717

**Isotype** IgG

#### **Applications**

#### The Abpromise guarantee

Our Abpromise quarantee covers the use of ab129004 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	<b>★★★★☆</b> (1)	1/1000 - 1/10000. Detects a band of approximately 55 kDa (predicted molecular weight: 54 kDa).
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.  Please note: ab129004 seems to be not suitable for the use in IHC-P with mouse samples.
ICC/IF		1/250 - 1/500.

**Application notes** 

Is unsuitable for Flow Cyt or IP.

#### **Target**

Function

Necessary for cellular interactions with laminin and the extracellular matrix.

Tissue specificity

Expressed in prostate, thymus, ovary, testis, pancreas, colon, heart, kidney, lung, liver, peripheral

blood leukocytes, placenta, skeletal muscle, small intestine and spleen.

Involvement in disease

Defects in ANTXR2 are the cause of infantile systemic hyalinosis (ISH) [MIM:236490]. This autosomal recessive syndrome is similar to JHF, but has an earlier onset and a more severe course. Symptoms appear at birth or within the first months of life, with painful, swollen joint contractures, osteopenia, osteoporosis and livid red hyperpigmentation over bony prominences. Patients develop multiple subcutaneous skin tumors and gingival hypertrophy. Hyaline deposits in multiple organs, recurrent infections and intractable diarrhea often lead to death within the first 2 years of life. Surviving children may suffer from severely reduced mobility due to joint contractures. Defects in ANTXR2 are the cause of juvenile hyaline fibromatosis (JHF) [MIM:228600]. JHF is an autosomal recessive syndrome that is similar to ISH but takes a milder course. It is characterized by hyaline deposition in the dermis, multiple subcutaneous skin tumors and gingival hypertrophy, followed by progressive joint contractions, osteopenia and osteoporosis that may lead to a severe limitation of mobility.

Sequence similarities

Belongs to the ATR family.

Contains 1 VWFA domain.

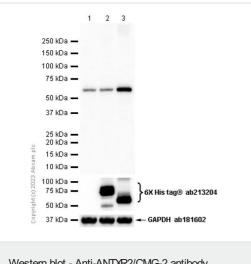
**Domain** 

Binding to PA seems to be effected through the VWA domain.

**Cellular localization** 

Secreted; Cell membrane. Expressed at the cell surface and Endoplasmic reticulum membrane. Expressed predominantly within the endoplasmic reticulum and not at the plasma membrane.

### **Images**



Western blot - Anti-ANTXR2/CMG-2 antibody [EPR7717] (ab129004)

**All lanes :** Anti-ANTXR2/CMG-2 antibody [EPR7717] (ab129004) at 1/1000 dilution

**Lane 1 :** HEK-293T (human epithelial cell from embryonic kidney transformed with large T antigen) transfected with an empty expression vector, whole cell lysate

**Lane 2**: HEK-293T transfected with full length His-tagged Human ANTR1 expression vectors, whole cell lysate

**Lane 3**: HEK-293T transfected with full length His-tagged Human ANTR2 expression vectors, whole cell lysate

Lysates/proteins at 20 µg per lane.

# Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 54 kDa Observed band size: 55 kDa

Exposure time: 60 seconds

Blocking and dilution buffer: 5% NFDM/TBST.
ab129004 doesn't recognize overexpressed ANTXR1.

KDa 1 2
250—
150—
100—
75—

Copyright (C) 2011 Abcam plc

Western blot - Anti-ANTXR2/CMG-2 antibody [EPR7717] (ab129004)

37-

15 **—** 

**All lanes :** Anti-ANTXR2/CMG-2 antibody [EPR7717] (ab129004) at 1/1000 dilution

Lane 1 : Mouse brain lysate
Lane 2 : Mouse heart lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 54 kDa Observed band size: 55 kDa

Exposure time: 180 seconds

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

1 2 3

250—
150—
100—
75—
50—
37—
25—
20—
15—
10—

Western blot - Anti-ANTXR2/CMG-2 antibody [EPR7717] (ab129004)

**All lanes :** Anti-ANTXR2/CMG-2 antibody [EPR7717] (ab129004) at 1/1000 dilution

Lane 1: Human fetal heart tissue lysate

Lane 2: ECV304 cell lysate

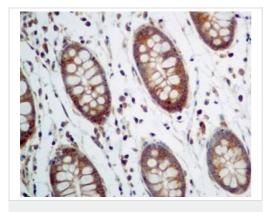
Lane 3: PC3 cell lysate

Lysates/proteins at 10 µg per lane.

# **Secondary**

All lanes: Goat anti-Rabbit HRP at 1/2000 dilution

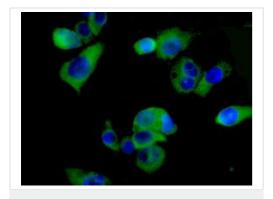
Predicted band size: 54 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ANTXR2/CMG-2 antibody [EPR7717] (ab129004)

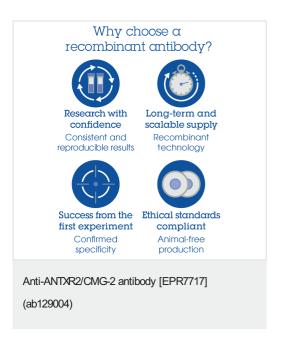
ab129004, at 1/250 dilution, staining ANTXR2/CMG-2 in paraffinembedded Human colon tissue by Immunohistochemistry.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-ANTXR2/CMG-2 antibody [EPR7717] (ab129004)

ab129004, at 1/250 dilution staining ANTXR2/CMG-2 in PC3 cells by Immunofluorescence.



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

## Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- · Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

# Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors