

## Product datasheet

# Anti-Activin Receptor Type IA antibody [EPR4076(2)] ab155981

Recombinant RabMAb

★★★★★ [1 Abreviews](#) [6 References](#) [5 Images](#)

### Overview

<b>Product name</b>	Anti-Activin Receptor Type IA antibody [EPR4076(2)]
<b>Description</b>	Rabbit monoclonal [EPR4076(2)] to Activin Receptor Type IA
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IP
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide within Human Activin Receptor Type IA aa 450 to the C-terminus. The exact sequence is proprietary. Database link: <a href="#">Q04771</a>
<b>Positive control</b>	WB: human, rat and mouse fetal brain lysate IP: mouse brain lysate
<b>General notes</b>	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> For more information <a href="#">see here</a> . Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> .

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 59% PBS, 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR4076(2)

Isotype

IgG

## Applications

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### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab155981 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)	1/1000 - 1/10000. Detects a band of approximately 57 kDa (predicted molecular weight: 57 kDa).
IP		1/10 - 1/100.

## Target

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### Function

On ligand binding, forms a receptor complex consisting of two type II and two type I transmembrane serine/threonine kinases. Type II receptors phosphorylate and activate type I receptors which autophosphorylate, then bind and activate SMAD transcriptional regulators. Receptor for activin. May be involved for left-right pattern formation during embryogenesis.

### Tissue specificity

Expressed in normal parenchymal cells, endothelial cells, fibroblasts and tumor-derived epithelial cells.

### Involvement in disease

Defects in ACVR1 are a cause of fibrodysplasia ossificans progressiva (FOP) [MIM:135100]. FOP is a rare autosomal dominant disorder of skeletal malformations and progressive extraskeletal ossification. Heterotopic ossification in FOP begins in childhood and can be induced by trauma or may occur without warning. Bone formation is episodic and progressive, leading to extra-articular ankylosis of all major joints of the axial and appendicular skeleton, rendering movement impossible.

### Sequence similarities

Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family. TGFB receptor subfamily.  
Contains 1 GS domain.  
Contains 1 protein kinase domain.

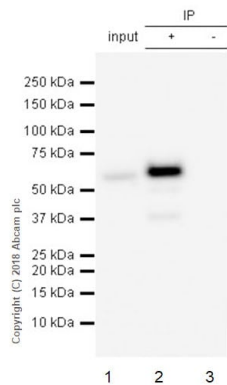
### Cellular localization

Membrane.

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## Images

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Immunoprecipitation - Anti-Activin Receptor Type IA antibody [EPR4076(2)] (ab155981)

ab155981 (purified) at 1:50 dilution (2µg) immunoprecipitating Activin Receptor Type IA in Mouse brain lysate.

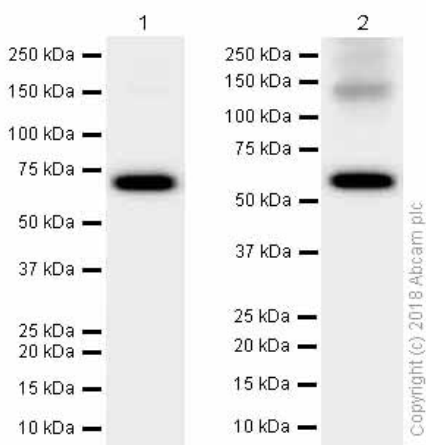
Lane 1 (input): Mouse brain lysate 10µg

Lane 2 (+): ab155981 & Mouse brain lysate

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab155981 in Mouse brain lysate

For western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used for detection at 1:1000 dilution.

Blocking and diluting buffer: 5% NFD/MTBST.



Western blot - Anti-Activin Receptor Type IA antibody [EPR4076(2)] (ab155981)

**All lanes** : Anti-Activin Receptor Type IA antibody [EPR4076(2)] (ab155981) at 0.5 µg/ml (purified)

**Lane 1** : Mouse brain lysate

**Lane 2** : Rat brain lysates

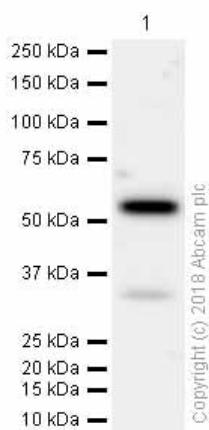
Lysates/proteins at 15 µg per lane.

#### Secondary

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

**Predicted band size:** 57 kDa

Blocking and diluting buffer: 5% NFD/MTBST.



Western blot - Anti-Activin Receptor Type IA antibody [EPR4076(2)] (ab155981)

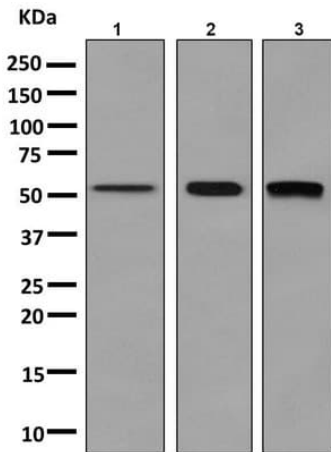
Anti-Activin Receptor Type IA antibody [EPR4076(2)] (ab155981) at 0.5 µg/ml (purified) + Human fetal brain lysates at 15 µg

**Secondary**

Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

**Predicted band size:** 57 kDa

Blocking and diluting buffer: 5% NFDM/TBST.



Western blot - Anti-Activin Receptor Type IA antibody [EPR4076(2)] (ab155981)

**All lanes :** Anti-Activin Receptor Type IA antibody [EPR4076(2)] (ab155981) at 1/1000 dilution (Unpurified)

**Lane 1 :** Fetal brain lysate

**Lane 2 :** Fetal heart lysate

**Lane 3 :** Fetal muscle lysate

Lysates/proteins at 10 µg per lane.

**Secondary**

**All lanes :** HRP labeled goat anti-rabbit IgG at 1/2000 dilution

**Predicted band size:** 57 kDa

**Observed band size:** 57 kDa

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-Activin Receptor Type IA antibody [EPR4076(2)]  
(ab155981)

**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

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- 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

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