# abcam

## Product datasheet

## Anti-ROR2 antibody [Nt 2535-2835] ab190145

## KO VALIDATED

## 2 References 3 Images

#### Overview

Product name Anti-ROR2 antibody [Nt 2535-2835]

**Description** Mouse monoclonal [Nt 2535-2835] to ROR2

Host species Mouse

Tested applications Suitable for: WB, IHC-P

Unsuitable for: ICC/IF

Species reactivity Reacts with: Rat, Human

Predicted to work with: Mouse

**Immunogen** Fusion protein. This information is proprietary to Abcam and/or its suppliers.

Positive control IHC-P: FFPE human prostate tissue sections. IHC-P: FFPE Human Stomach

General notes This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or

conjugation for your experiments, please contact orders@abcam.com.

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). Store at -20°C.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Some batches contain 6.97% L-Arginine as a stabilizing agent. For lot-specific buffer information,

please contact our Scientific Support team.

**Purity** Protein G purified

**Clonality** Monoclonal

Clone number Nt 2535-2835

**Light chain type** lgG1 kappa

#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab190145 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		Use a concentration of 1 - 5 μg/ml. Predicted molecular weight: 105 kDa.
IHC-P		Use a concentration of 10 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

**Application notes** Is unsuitable for ICC/IF.

**Target** 

**Function** Tyrosine-protein kinase receptor which may be involved in the early formation of the chondrocytes.

It seems to be required for cartilage and growth plate development. Phosphorylates YWHAB,

leading to induction of osteogenesis and bone formation.

Involvement in disease Brachydactyly B1

Robinow syndrome autosomal recessive

**Sequence similarities**Belongs to the protein kinase superfamily. Tyr protein kinase family. ROR subfamily.

Contains 1 FZ (frizzled) domain.

Contains 1 lg-like C2-type (immunoglobulin-like) domain.

Contains 1 kringle domain.

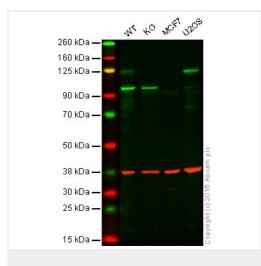
Contains 1 protein kinase domain.

**Developmental stage** Expressed at high levels during early embryonic development. The expression levels drop strongly

around day 16 and there are only very low levels in adult tissues.

**Cellular localization** Cell membrane.

## Images



Western blot - Anti-ROR2 antibody [Nt 2535-2835] (ab190145)

Lane 1: Wild-type HAP1 whole cell lysate (20 µg)

Lane 2: ROR2 knockout HAP1 whole cell lysate (20 µg)

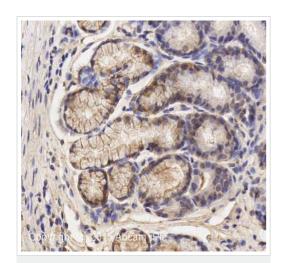
Lane 3: MCF7 whole cell lysate (20 µg)

Lane 4: U20S whole cell lysate (20 µg)

**Lanes 1 - 4:** Merged signal (red and green). Green - ab190145 observed at 125 kDa. Red - loading control, **ab181602**, observed at 37 kDa.

ab190145 was shown to recognize ROR2 in wild-type HAP1 cells along with additional cross-reactive bands. No band was observed when ROR2 knockout samples were examined. Wild-type and ROR2 knockout samples were subjected to SDS-PAGE.

Ab190145 and ab181602 (Rabbit anti GAPDH loading control) were incubated overnight at 4°C at 1 ug/ml and 1/10,000 dilution respectively. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 800CW) ab216772 and Goat anti-Rabbit IgG H&L (IRDye® 680RD) ab216777 secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.

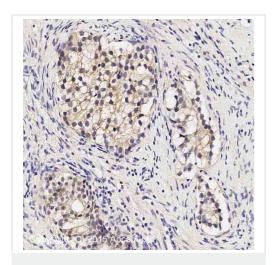


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ROR2 antibody [Nt 2535-2835] (ab190145)

IHC image of ROR2 staining in Normal Human Stomach formalin fixed paraffin embedded tissue section\*, performed on a Leica Bond™ system using the standard protocol F/B. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab190145, 10µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

\*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ROR2 antibody [Nt 2535-2835] (ab190145)

IHC image of ROR2 staining in Human normal prostate formalin fixed paraffin embedded tissue section\*, performed on a Leica Bond™ system using the standard protocol F. The section was pretreated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab190145, 10µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

\*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre

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