


Product datasheet

Anti-Sigma1-receptor antibody ab151288

2 References 3 Images

Overview

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<b>Product name</b>	Anti-Sigma1-receptor antibody
<b>Description</b>	Rabbit polyclonal to Sigma1-receptor
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human, Zebrafish <b>Predicted to work with:</b> Mouse, Rat, Guinea pig, Cow, Rhesus monkey 
<b>Immunogen</b>	Recombinant fragment corresponding to Human Sigma1-receptor aa 8-223. Database link: <a href="#">Q99720</a>
<b>Positive control</b>	293T whole cell lysate; Human SW480 xenograft tissue.
<b>General notes</b>	<p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications &amp; species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications &amp; species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications &amp; species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications &amp; species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.</p> <p>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, as well as customer reviews and Q&amp;As.</p>

Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.00 Preservative: 0.01% Thimerosal (merthiolate) Constituents: 1.21% Tris, 0.75% Glycine, 20% Glycerol (glycerin, glycerine)
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

Our [Abpromise guarantee](#) covers the use of **ab151288** in the following tested applications.

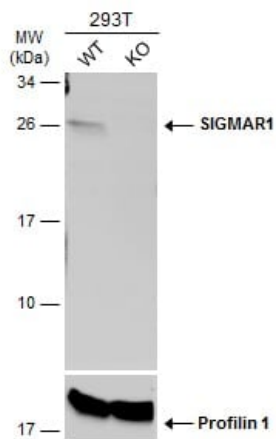
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500 - 1/3000. Predicted molecular weight: 25 kDa.
IHC-P		1/100 - 1/1000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

## Target

<b>Function</b>	Functions in lipid transport from the endoplasmic reticulum and is involved in a wide array of cellular functions probably through regulation of the biogenesis of lipid microdomains at the plasma membrane. Involved in the regulation of different receptors it plays a role in BDNF signaling and EGF signaling. Also regulates ion channels like the potassium channel and could modulate neurotransmitter release. Plays a role in calcium signaling through modulation together with ANK2 of the ITP3R-dependent calcium efflux at the endoplasmic reticulum. Plays a role in several other cell functions including proliferation, survival and death. Originally identified for its ability to bind various psychoactive drugs it is involved in learning processes, memory and mood alteration.
<b>Tissue specificity</b>	Widely expressed with higher expression in liver, colon, prostate, placenta, small intestine, heart and pancreas. Expressed in the retina by retinal pigment epithelial cells.
<b>Involvement in disease</b>	Amyotrophic lateral sclerosis 16, juvenile
<b>Sequence similarities</b>	Belongs to the ERG2 family.
<b>Cellular localization</b>	Nucleus inner membrane. Nucleus outer membrane. Endoplasmic reticulum membrane. Lipid droplet. Cell junction. Cell membrane. Cell projection > growth cone. Targeted to lipid droplets, cholesterol and galactosylceramide-enriched domains of the endoplasmic reticulum. Enriched at cell-cell communication regions, growth cone and postsynaptic structures. Localization is modulated by ligand-binding.

## Images



Western blot - Anti-Sigma1-receptor antibody (ab151288)

**All lanes** : Anti-Sigma1-receptor antibody (ab151288) at 1/500 dilution

**Lane 1** : WT 293T cell extracts

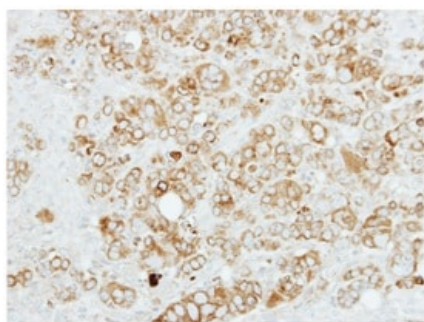
**Lane 2** : Sigma1-receptor Knockout 293T cell extracts

Lysates/proteins at 30 µg per lane.

**Secondary**

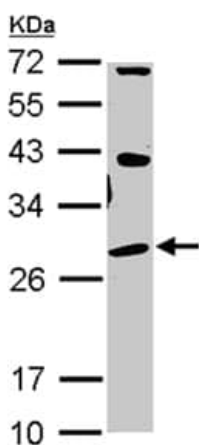
**All lanes** : HRP-conjugated anti-rabbit IgG

**Predicted band size:** 25 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Sigma1-receptor antibody (ab151288)

Immunohistochemical analysis of paraffin-embedded Human SW480 xenograft labeling Sigma1-receptor with ab151288 at 1/100 dilution.



Western blot - Anti-Sigma1-receptor antibody (ab151288)

Anti-Sigma1-receptor antibody (ab151288) at 1/1000 dilution + 293T whole cell lysate at 30 µg

**Predicted band size:** 25 kDa

12% SDS PAGE

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