

## Product datasheet

# Anti-Superoxide Dismutase 3/EC-SOD antibody [4G11G6] ab80946

★★★★★ [1 Abreviews](#) [13 References](#) [3 Images](#)

### Overview

<b>Product name</b>	Anti-Superoxide Dismutase 3/EC-SOD antibody [4G11G6]
<b>Description</b>	Mouse monoclonal [4G11G6] to Superoxide Dismutase 3/EC-SOD
<b>Host species</b>	Mouse
<b>Specificity</b>	Detects extracellular Superoxide Dismutase 3/EC-SOD.
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt, ELISA, ICC/IF, IHC-Fr, WB, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Full length native protein (purified) corresponding to Human Superoxide Dismutase 3/EC-SOD. Database link: <a href="#">P08294</a>
<b>Positive control</b>	Human cartilage lysate
<b>General notes</b>	<p>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.</p> <p>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&amp;As</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
<b>Storage buffer</b>	Preservative: 0.09% Sodium azide Constituents: 50% Glycerol (glycerin, glycerine), PBS
<b>Purity</b>	Protein G purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	4G11G6
<b>Isotype</b>	IgG1
<b>Light chain type</b>	kappa

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab80946 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
Flow Cyt		Use 2µg for 10 <sup>6</sup> cells. <b>ab170190</b> - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
ELISA		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
IHC-Fr		Use at an assay dependent concentration.
WB	★★★★★ (1)	1/1000. Detects a band of approximately 35 kDa (predicted molecular weight: 26 kDa).
IHC-P		1/100.

## Target

### Function

Protect the extracellular space from toxic effect of reactive oxygen intermediates by converting superoxide radicals into hydrogen peroxide and oxygen.

### Tissue specificity

Expressed in blood vessels, heart, lung, kidney and placenta. Major SOD isoenzyme in extracellular fluids such as plasma, lymph and synovial fluid.

### Sequence similarities

Belongs to the Cu-Zn superoxide dismutase family.

### Cellular localization

Secreted > extracellular space. 99% of EC-SOD is anchored to heparan sulfate proteoglycans in the tissue interstitium, and 1% is located in the vasculature in equilibrium between the plasma and the endothelium.

## Images



Western blot - Anti-Superoxide Dismutase 3/EC-SOD antibody [4G11G6] (ab80946)

Anti-Superoxide Dismutase 3/EC-SOD antibody [4G11G6] (ab80946) at 1 µg/ml + Lung (Mouse) Tissue Lysate at 10 µg

### Secondary

Goat Anti-Mouse IgG H&L (HRP) preadsorbed (**ab97040**) at 1/5000 dilution

Developed using the ECL technique.

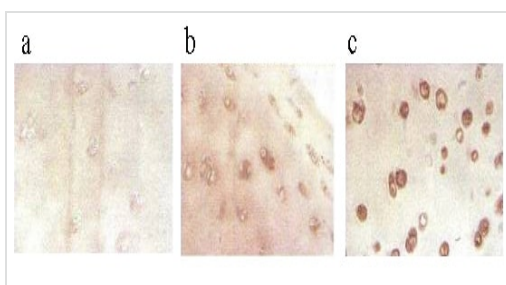
Performed under reducing conditions.

**Predicted band size:** 26 kDa

**Observed band size:** 25 kDa

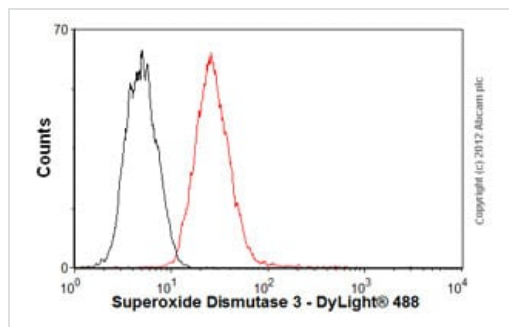
**Additional bands at:** 54 kDa. We are unsure as to the identity of these extra bands.

**Exposure time:** 1 minute



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Superoxide Dismutase 3/EC-SOD antibody [4G11G6] (ab80946)

ab80946 at 1/100 dilution staining Superoxide Dismutase 3/EC-SOD in human cartilage by Immunohistochemistry (Bouin's fixative fixed paraffin-embedded tissue section). Antigen retrieval was done by microwave in citrate buffer. A HRP-conjugated anti mouse secondary was used at 1/10 dilution. Image 'a' represents control, 'b' staining of tissue from young human cartilage and 'c' show staining cartilage of a person suffered from osteoarthritis.



Flow Cytometry - Anti-Superoxide Dismutase 3/EC-SOD antibody [4G11G6] (ab80946)

Overlay histogram showing HEK293 cells stained with ab80946 (red line). The cells were fixed with 80% methanol (5 min) and incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab80946, 2µg/1x10<sup>6</sup> cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (**ab91353**, 2µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >5,000 events was performed.

Please note that Abcam do not have any data for use of this antibody on non-fixed cells. We welcome any customer feedback.

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

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