abcam

ab110300

Anti-SOD2/MnSOD antibody [9E2BD2]

KO Validated

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	pH: 7.5 Preservative: 0.02% Sodium azide Constituents: HEPES buffered saline
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	9E2BD2
Purification technique	Affinity purification
Light chain type	kappa
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Near homogeneity as judged by SDS-PAGE. ab110300 was produced invitro using hybridomas grown in serum-free medium, and then purified by affinitypurification.

Reactivity data

IHC-P

Tested

Species	Human

Dilution info	1/100
Notes	use 1mmol EDTA pH8 Perform heat-mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.

Flow Cyt

Tested

Species	Human
Dilution info	1 µg/mL
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

ICC/IF

Tested

Species	Human
Dilution info	1-5 µg/mL
Notes	-

Target data

See full target information Superoxide dismutase [Mn], mitochondrial

Function	Destroys superoxide anion radicals which are normally produced within the cells and which are toxic to biological systems.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

Want a custom formulation?
This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

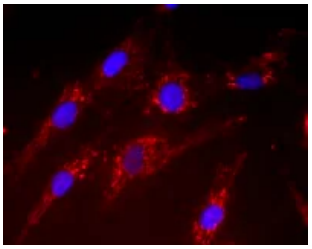
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

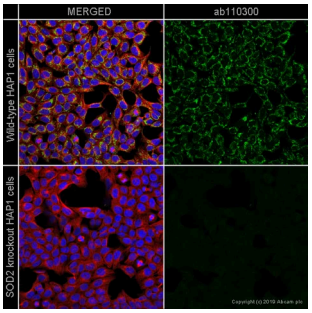
4 product images



Immunocytochemistry/ Immunofluorescence - Anti-SOD2/MnSOD antibody [9E2BD2] (ab110300)

SOD2/MnSOD Immunocytochemistry/ Immunofluorescence staining using mouse Anti-SOD2/MnSOD antibody

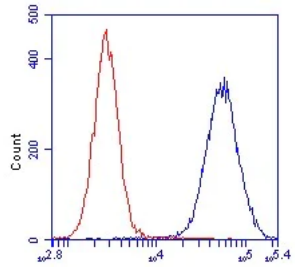
Immunocytochemistry image of Superoxide Dismutase 2 stained Human HDFn cells. The cells were paraformaldehyde fixed (4%, 20 min) and Triton X-100 permeabilized (0.1%, 15min). The cells were incubated with ab110300 at 5 µg/ml for 2h at room temperature or over night at 4°C. The secondary antibody was (red) Alexa Fluor® 594 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1h. 10% Goat serum was used as the blocking agent for all blocking steps. DAPI was used to stain the cell nuclei (blue). Target protein locates mainly in mitochondria.



Immunocytochemistry/ Immunofluorescence - Anti-SOD2/MnSOD antibody [9E2BD2] (ab110300)

SOD2/MnSOD Immunocytochemistry/ Immunofluorescence staining using mouse Anti-SOD2/MnSOD antibody

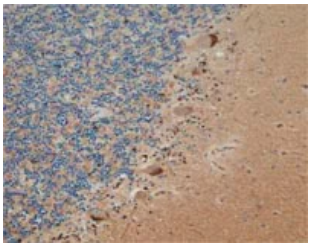
ab110300 staining SOD2 in wild-type HAP1 cells (top panel) and SOD2 knockout HAP1 cells (bottom panel). The cells were fixed with 4% paraformaldehyde (10min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with ab110300 at 5ug/ml and ab6046 (Tubulin) at 1/1000 dilution overnight at +4°C, followed by a further incubation at room temperature for 1h with a goat secondary antibody to mouse IgG (Alexa Fluor® 488) (ab150117) at 2 µg/ml (shown in green) and a goat secondary antibody to rabbit IgG (Alexa Fluor® 594) (ab150080) at 2 µg/ml (shown in pseudo color red). Nuclear DNA was labelled in blue with DAPI. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Flow Cytometry - Anti-SOD2/MnSOD antibody [9E2BD2] (ab110300)

SOD2/MnSOD Flow Cytometry staining using mouse Anti-SOD2/MnSOD antibody

HL-60 cells were stained with 1 µg/mL ab110300 in blue or an equal amount of an isotype control antibody (red) and analyzed by flow cytometry.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOD2/MnSOD antibody [9E2BD2] (ab110300)

SOD2/MnSOD Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-SOD2/MnSOD antibody

Immunohistochemistry of Superoxide Dismutase 2 in Human cerebellum visualized with ab110300. Superoxide Dismutase 2 immunoactivity is most intense in neuronal cell bodies, most notably in the large Purkinje cells. Note the distinctive subcellular localization of Superoxide Dismutase 2 immunoreactivity in the Purkinje cell bodies.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.