abcam

Product datasheet

Anti-Surf1 antibody [21H2BG4] ab110256

4 References 2 Images

Overview

Product name	Anti-Surf1 antibody [21H2BG4]
Description	Mouse monoclonal [21H2BG4] to Surf1
Host species	Mouse
Tested applications	**Suitable for:** WB, Flow Cyt
Species reactivity	**Reacts with:** Human
Immunogen	Recombinant full length protein. This information is considered to be commercially sensitive.
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 Product was previously marketed under the MitoSciences sub-brand.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.5 Preservative: 0.02% Sodium azide Constituent: HEPES buffered saline
Purification notes	Near homogeneity as judged by SDS-PAGE. The antibody was produced in vitro using hybridomas grown in serum-free medium, and then purified by biochemical fractionation.
Clonality	Monoclonal
Clone number	21H2BG4
Isotype	IgG1

Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab110256 in the following tested applications.

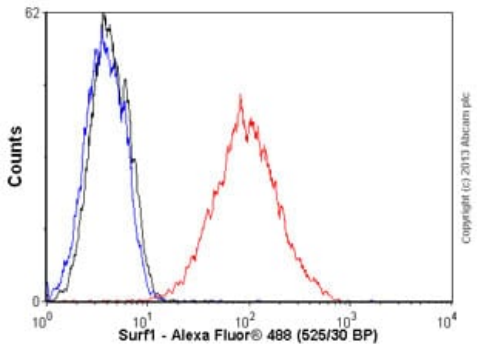
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 33 kDa.
Flow Cyt		Use 0.1µg for 10^6 cells. **ab170190** - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target

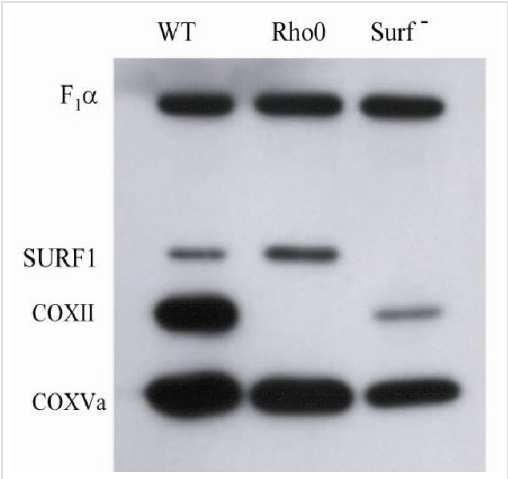
Function	Probably involved in the biogenesis of the COX complex.
Involvement in disease	Defects in SURF1 are a cause of Leigh syndrome (LS) [MIM:256000]. LS is a severe neurological disorder characterized by bilaterally symmetrical necrotic lesions in subcortical brain regions that is commonly associated with systemic cytochrome c oxidase (COX) deficiency.
Sequence similarities	Belongs to the SURF1 family.
Cellular localization	Mitochondrion inner membrane.

Images



Flow Cytometry - Anti-Surf1 antibody [21H2BG4] (ab110256)

Overlay histogram showing HepG2 cells stained with ab110256 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab110256, 0.1µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-mouse IgG (H&L) (**ab150113**) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (**ab91353**, 1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive signal in HepG2 cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.



Western blot - Anti-Surf1 antibody [21H2BG4] (ab110256)

Complex IV assembly factor SURF1 identification. This mAb can be used to verify the presence of Complex IV assembly factor SURF1. Blotted alongside are mAbs against the ATP synthase subunit F1α subunit, an abundant mitochondrial protein acting as a control for gel loading. To indicate the assembly state of the cytochrome c oxidase, mAbs against the nuclear cytochrome c oxidase subunit COXVα and the mitochondrially encoded COXII subunit are also blotted in this Figure.