

Product datasheet

Anti-GRIM19 antibody [6E1BH7] ab110240

KO VALIDATED

★★★★☆ 4 Abreviews 52 References 4 Images

Overview

Product name	Anti-GRIM19 antibody [6E1BH7]
Description	Mouse monoclonal [6E1BH7] to GRIM19
Host species	Mouse
Tested applications	Suitable for: WB, ICC/IF, Flow Cyt
Species reactivity	Reacts with: Mouse, Rat, Cow, Human
Immunogen	Recombinant full length protein. This information is considered to be commercially sensitive.
Positive control	WB: HeLa and Jurkat cell lysates; Human heart, Bovine heart, Rat heart, and Mouse heart isolated mitochondria. ICC/IF: Human fibroblasts. Flow Cyt: HeLa cells.
General notes	<p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com.</p> <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&As</p> <p>Product was previously marketed under the MitoSciences sub-brand.</p>

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	ab110240 was produced in vitro using hybridomas grown in serum-free medium, and then purified by biochemical fractionation.

Clonality	Monoclonal
Clone number	6E1BH7
Isotype	IgG2b
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab110240 in the following tested applications.

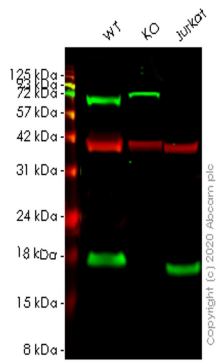
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (1)	Use a concentration of 1 µg/ml. Predicted molecular weight: 17 kDa.
ICC/IF	★★★★★ (1)	Use a concentration of 1 µg/ml.
Flow Cyt		Use a concentration of 1 µg/ml. ab170192 - Mouse monoclonal IgG2b, is suitable for use as an isotype control with this antibody.

Target

Function	Accessory subunit of the mitochondrial membrane respiratory chain NADH dehydrogenase (Complex I), that is believed not to be involved in catalysis. Complex I functions in the transfer of electrons from NADH to the respiratory chain. The immediate electron acceptor for the enzyme is believed to be ubiquinone. Involved in the interferon/all-trans-retinoic acid (IFN/RA) induced cell death. This apoptotic activity is inhibited by interaction with viral IRF1. Prevents the transactivation of STAT3 target genes. May play a role in CARD15-mediated innate mucosal responses and serve to regulate intestinal epithelial cell responses to microbes.
Tissue specificity	Widely expressed, with highest expression in heart, skeletal muscle, liver, kidney and placenta. In intestinal mucosa, down-regulated in areas involved in Crohn disease and ulcerative colitis.
Involvement in disease	Defects in NDUFA13 may be a cause of susceptibility to Hurthle cell thyroid carcinoma (HCTC) [MIM:607464]. Hurthle cell thyroid carcinoma accounts for approximately 3% of all thyroid cancers. Although they are classified as variants of follicular neoplasms, they are more often multifocal and somewhat more aggressive and are less likely to take up iodine than are other follicular neoplasms.
Sequence similarities	Belongs to the complex I NDUFA13 subunit family.
Developmental stage	Expressed in numerous fetal tissues.
Cellular localization	Mitochondrion inner membrane. Nucleus. May be translocated into the nucleus upon IFN/RA treatment.

Images



Western blot - Anti-GRIM19 antibody [6E1BH7] (ab110240)

All lanes : Anti-GRIM19 antibody [6E1BH7] (ab110240) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : NDUFA13 knockout HeLa cell lysate

Lane 3 : Jurkat cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

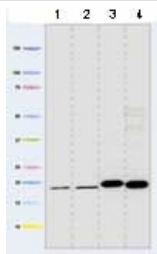
All lanes : Goat Anti-Rabbit IgG H&L (IRDye® 680RD) preadsorbed ([ab216777](#)) at 1/10000 dilution

Predicted band size: 17 kDa

Observed band size: 17 kDa

Lanes 1-3: Merged signal (red and green). Green - ab110240 observed at 17 kDa. Red - loading control [ab181602](#) observed at 36 kDa.

ab110240 GRIM19 antibody [6E1BH7] was shown to specifically react with GRIM19 in wild-type HeLa cells. Loss of signal was observed when knockout cell line [ab265863](#) (knockout cell lysate [ab257136](#)) was used. Wild-type and GRIM19 knockout samples were subjected to SDS-PAGE. ab110240 and Anti-GAPDH antibody[EPR16891] - Loading Control ([ab181602](#)) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 680RD) preadsorbed ([ab216777](#)) and Goat anti-Mouse IgG H&L (IRDye® 800CW) preadsorbed ([ab216772](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-GRIM19 antibody [6E1BH7] (ab110240)

All lanes : Anti-GRIM19 antibody [6E1BH7] (ab110240) at 1 $\mu\text{g/ml}$

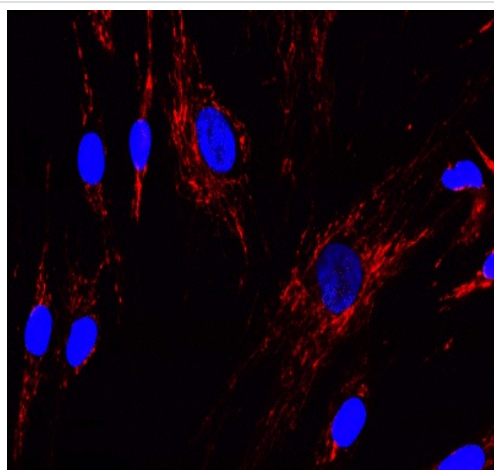
Lane 1 : Human heart mitochondria

Lane 2 : Bovine heart mitochondria

Lane 3 : Rat heart mitochondria

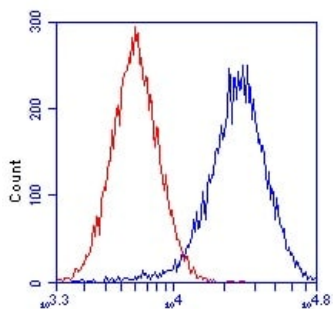
Lane 4 : Mouse heart mitochondria

Predicted band size: 17 kDa



Immunocytochemistry/ Immunofluorescence - Anti-GRIM19 antibody [6E1BH7] (ab110240)

Mitochondrial localization of GRIM19 visualized by immunocytochemistry using ab110240 at a concentration of 1 $\mu\text{g/mL}$. Cultured Human fibroblasts were fixed, permeabilized and then labeled with ab110240 followed by Alexa[®] 488 goat-anti-mouse IgG.



Flow Cytometry - Anti-GRIM19 antibody [6E1BH7] (ab110240)

HeLa cells were stained with 1 $\mu\text{g/mL}$ ab110240 (blue) or an equal amount of an isotype control antibody (red) and analyzed by flow cytometry.

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