abcam

Product datasheet

Anti-GCN2 antibody [EPR5970(2)] - BSA and Azide free ab157775

KO VALIDATED Recombinant RabMAb

6 Images

Overview

Product name	Anti-GCN2 antibody [EPR5970(2)] - BSA and Azide free
Description	Rabbit monoclonal [EPR5970(2)] to GCN2 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P, ICC/IF, WB, Flow Cyt
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide within Human GCN2 aa 1-100 (N terminal). The exact sequence is proprietary.
General notes	Ab157775 is the carrier-free version of ab134053. This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes. Our carrier-free formats are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency. Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. ab157775 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMab® patents. This product is a recombinant rabbit monoclonal antibody.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Constituent: PBS
Purity	Protein A purified
Clonality	Monoclonal

Clone number	EPR5970(2)
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab157775** in the following tested applications.

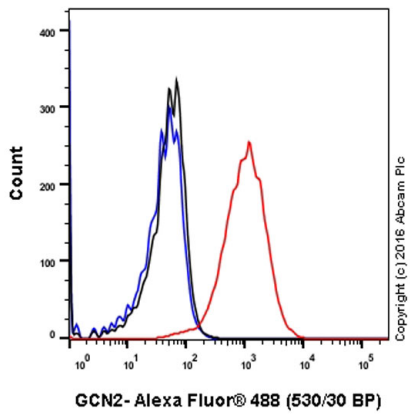
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols.
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 220 kDa (predicted molecular weight: 187 kDa).
Flow Cyt		Use at an assay dependent concentration. ab199376 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Target

Function	Can phosphorylate the alpha subunit of EIF2 and may mediate translational control.
Tissue specificity	Widely expressed.
Sequence similarities	Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. GCN2 subfamily. Contains 2 protein kinase domains. Contains 1 RWD domain.
Domain	Kinase domain 1 is a degenerate kinase domain. RWD domain is reported to interact with GCN1L1.
Post-translational modifications	Autophosphorylated on threonine residues.

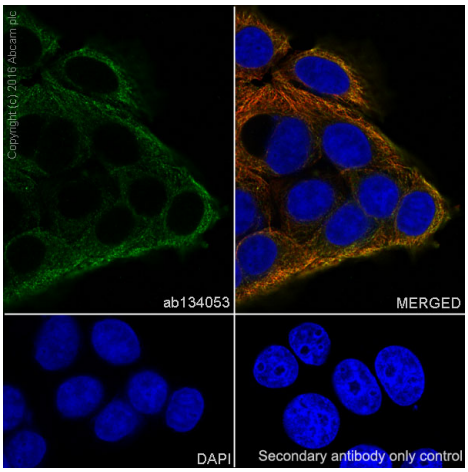
Images



Flow Cytometry - Anti-GCN2 antibody [EPR5970(2)] - BSA and Azide free (ab157775)

Flow Cytometry analysis of MCF7 (Human breast adenocarcinoma cell line) cells labeling GCN2 with purified ab134053 at 1/100 dilution (10 ug/ml). Cells were fixed with 4% paraformaldehyde. A Goat anti-rabbit IgG (Alexa Fluor® 488) secondary antibody was used at 1/2000 dilution. Rabbit monoclonal IgG (Black) was used as the isotypre control. Cells without incubation with the primary antibody and secondary antibody (Blue) is the unlabeled control.

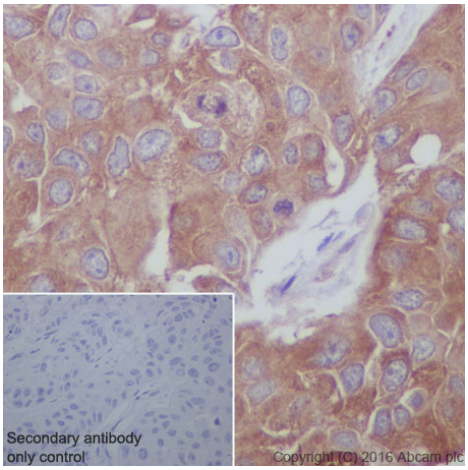
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab134053).



Immunocytochemistry/ Immunofluorescence - Anti-GCN2 antibody [EPR5970(2)] - BSA and Azide free (ab157775)

Immunocytochemistry/ Immunofluorescence analysis of MCF7 (Human breast adenocarcinoma cell line) cells labeling GCN2 with ab134053 at 1/250 dilution (4.0µg/ml). The cells were co-stained with ab195889, an Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) at 1/200 (2.5 µg/ml). Cells were fixed with 100% methanol. ab150077, a Goat anti-rabbit IgG(Alexa Fluor® 488) secondary antibody was used at 1/1000 dilution. DAPI was used as the nuclear counter stain.

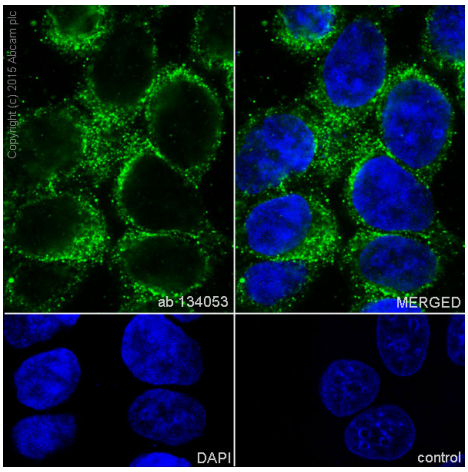
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab134053).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GCN2 antibody [EPR5970(2)] - BSA and Azide free (ab157775)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human breast carconoma tissue sections labeling GCN2 with purified ab134053 at 1/100 dilution (10 µg/ml). Heat mediated antigen retrieval was performed using EDTA Buffer, PH9. ab97051, a Goat Anti-Rabbit IgG H&L (HRP) secondary antibody was used at 1/500 dilution. Tissue was counterstained with hematoxylin. PBS instead of the primary antibody was used as the negative control.

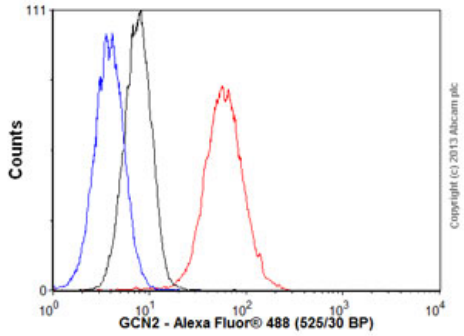
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab134053).



Immunocytochemistry/ Immunofluorescence - Anti-GCN2 antibody [EPR5970(2)] - BSA and Azide free (ab157775)

Immunofluorescence staining of MCF-7 cells with purified ab134053 at a working dilution of 1/500, counter-stained with DAPI. The secondary antibody was an Alexa Fluor® 488 conjugated goat anti-rabbit (ab150077), used at a dilution of 1/1000. The cells were fixed in 100% methanol. The negative control is shown in bottom right hand panel - for the negative control, PBS was used instead of the primary antibody.

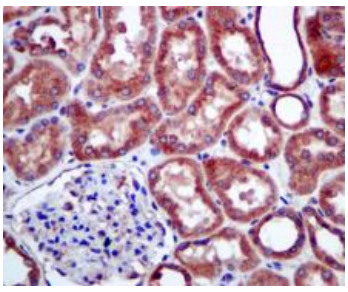
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab134053).



Flow Cytometry - Anti-GCN2 antibody [EPR5970(2)] - BSA and Azide free (ab157775)

Overlay histogram showing HeLa cells stained with unpurified ab134053 (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 (ab134053, 1/10000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) (ab150077) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/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 HeLa cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab134053).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GCN2 antibody [EPR5970(2)] - BSA and Azide free (ab157775)

Immunohistochemical analysis of paraffin-embedded Human kidney tissue labelling GCN2 with unpurified ab134053 at 1/100 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab134053).

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