abcam

Product datasheet

Anti-Fyn antibody [EPR5500] - BSA and Azide free ab240015

KO VALIDATED Recombinant RabMAb

3 Images

Overview

Product name	Anti-Fyn antibody [EPR5500] - BSA and Azide free
Description	Rabbit monoclonal [EPR5500] to Fyn - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** ICC/IF, WB **Unsuitable for:** IHC-P
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
General notes	ab240015 is the carrier-free version of **ab125016**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. 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. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR5500
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab240015 in the following tested applications.

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

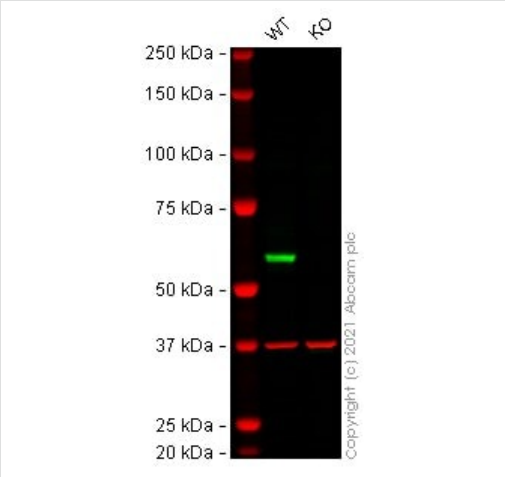
Application	Abreviews	Notes
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 60 kDa (predicted molecular weight: 60 kDa).

Application notes Is unsuitable for IHC-P.

Target

Function	Tyrosine-protein kinase implicated in the control of cell growth. Plays a role in the regulation of intracellular calcium levels, with isoform 2 showing the greater ability to mobilize cytoplasmic calcium in comparison to isoform 1. Required in brain development and mature brain function with important roles in the regulation of axon growth, axon guidance, and neurite extension. Blocks axon outgrowth and attraction induced by NTN1 by phosphorylating its receptor DDC. Phosphorylates RUNX3.
Tissue specificity	Isoform 1 is highly expressed in the brain. Isoform 2 is expressed in cells of hemopoietic lineages, especially T lymphocytes.
Sequence similarities	Belongs to the protein kinase superfamily. Tyr protein kinase family. SRC subfamily. Contains 1 protein kinase domain. Contains 1 SH2 domain. Contains 1 SH3 domain.
Cellular localization	Cell membrane. Present and active in lipid rafts. Present in cell body and along the process of mature and developing oligodendroyctes.
Form	This protein is known to be similar in amino acid sequence to HCK (P08631), LCK (P06239), YES1 (P07947), SRC (P12931), and LYN (P07948). Therefore, cross-reactivity with these homologous proteins may be observed. We would be happy to provide immunogen alignment information upon request.

Images



Western blot - Anti-Fyn antibody [EPR5500] - BSA and Azide free (ab240015)

All lanes : Anti-Fyn antibody [EPR5500] (**ab125016**) at 1/1000 dilution

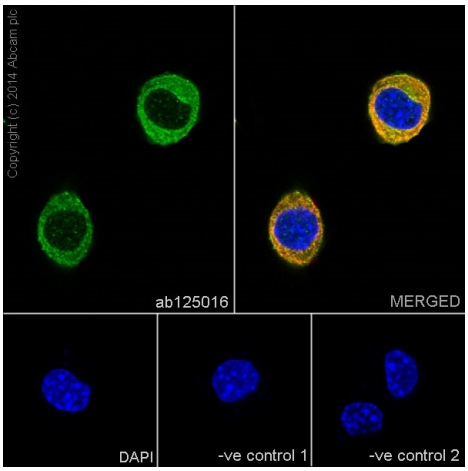
Lane 1 : Wild-type HEK-293 cell lysate
Lane 2 : FYN knockout HEK-293 cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 60 kDa
Observed band size: 60 kDa

False colour image of Western blot: Anti-Fyn antibody [EPR5500] staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] (**ab8245**) loading control staining at 1/20000 dilution, shown in red. In Western blot, **ab125016** was shown to bind specifically to Fyn. A band was observed at 60 kDa in wild-type HEK-293 cell lysates with no signal observed at this size in FYN knockout cell line **ab269630** (knockout cell lysate **ab272440**). To generate this image, wild-type and FYN knockout HEK-293 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4°C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) at 1/20000 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-Fyn antibody [EPR5500] - BSA and Azide free (ab240015)

Immunofluorescence staining of Neuro-2a cells with purified **ab125016** at a working dilution of 1 in 500, counter-stained with DAPI. The secondary antibody was Alexa Fluor® 488 goat anti rabbit (**ab150077**), used at a dilution of 1 in 500. **ab7291** was used to stain tubulin, and this is shown in the top right hand panel. The cells were fixed in 4% PFA and permeabilized using 0.1% Triton X 100. The negative control is shown in bottom middle and right hand panels - for the negative controls, purified **ab125016** was used at a dilution of 1/200 followed by an Alexa Fluor® 594 goat anti-mouse antibody at a dilution of 1/500.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab125016**).

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