abcam

Product datasheet

Anti-Dkk3 antibody [EPR15611] - BSA and Azide free ab232657



5 Images

Overview

Product name Anti-Dkk3 antibody [EPR15611] - BSA and Azide free

Description Rabbit monoclonal [EPR15611] to Dkk3 - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: WB, IP, ICC/IF

Reacts with: Human **Species reactivity**

Predicted to work with: Mouse, Rat

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: Human fetal brain, heart and kidney lysates; HepG2 cells, A549 whole cell lysate. ICC/IF:

HepG2 cells. IP: Human fetal brain lysate

General notes ab232657 is the carrier-free version of ab186409.

> 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 cellbased 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

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 EPR15611

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab232657 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: 38 kDa.
IP		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.

Target

Function Antagonizes canonical Wnt signaling by inhibiting LRP5/6 interaction with Wnt and by forming a

ternary complex with the transmembrane protein KREMEN that promotes internalization of LRP5/6. DKKs play an important role in vertebrate development, where they locally inhibit Wnt regulated processes such as antero-posterior axial patterning, limb development, somitogenesis and eye formation. In the adult, Dkks are implicated in bone formation and bone disease, cancer

and Alzheimer disease.

Tissue specificity Highest expression in heart, brain, and spinal cord.

Sequence similarities Belongs to the dickkopf family.

Domain The C-terminal cysteine-rich domain mediates interaction with LRP5 and LRP6.

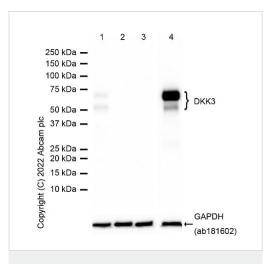
Post-translational

modifications

N- and O-glycosylated.

Cellular localization Secreted.

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Western blot - Anti-Dkk3 antibody [EPR15611] - BSA and Azide free (ab232657)

All lanes : Anti-Dkk3 antibody [EPR15611] (ab186409) at 1/1000 dilution

Lane 1: A549 (Human lung carcinoma epithelial cell) whole cell lysate

Lane 2 : PC-3 (Human prostate adenocarcinoma epithelial cell) whole cell lysate

Lane 3 : BxPC-3 (Human pancreas adenocarcinoma epithelial cell) whole cell lysate

Lane 4: Human heart tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 38 kDa **Observed band size:** 50-70 kDa

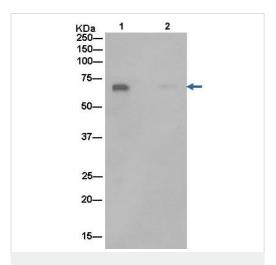
Exposure time: 10 seconds

Blocking buffer and concentration: 5% NFDM/TBST

Diluting buffer and concentration: 5% NFDM/TBST

DKK3 shows 50-70 kDa bands, which is due to glycosylation (PMID: 28674110. PMID: 28738084). DKK3 is not expressed in PC-3 and BxPC-3. Negative control: PC-3 (PMID: 22941469), BxPC-3 (PMID: 28470144, PMID: 26395974, PMID: 34391478).

This data was developed using the same antibody clone in a different buffer formulation (<u>ab186409</u>).

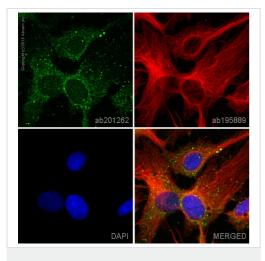


Immunoprecipitation - Anti-Dkk3 antibody
[EPR15611] - BSA and Azide free (ab232657)

Western blot analysis of Dkk3 in Human fetal brain lysate immunoprecipitated with <u>ab186409</u> at 1/50 dilution (Lane 1). Lane 2: PBS instead of Human fetal brain lysate.

Secondary antibody: Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1500 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab186409).

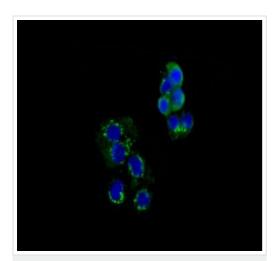


Immunocytochemistry/ Immunofluorescence - Anti-Dkk3 antibody [EPR15611] - BSA and Azide free (ab232657)

Clone EPR15611 (ab232657) has been successfully conjugated by Abcam. This image was generated using Anti-Dkk3 antibody [EPR15611] (Alexa Fluor® 488). Please refer to **ab201262** for protocol details.

ab201262 staining Dkk3 in HepG2 cells. The cells were fixed with 100% methanol (5 min), 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 overnight at +4°C with ab201262 at a 1/100 dilution (shown in green) and ab195889, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 594), at a 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Immunocytochemistry/ Immunofluorescence - Anti-Dkk3 antibody [EPR15611] - BSA and Azide free (ab232657)

Immunofluorescent analysis of 4% paraformaldehyde-fixed HepG2 (human liver hepatocellular carcinoma cell line) cells labeling Dkk3 with <u>ab186409</u> at 1/100 dilution, followed by Goat anti rabbit lgG (Alexa Fluor® 488) secondary antibody at 1/200 dilution. Counter stained with Dapi (blue).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab186409).



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