abcam

Product datasheet

Anti-Connexin 32 / GJB1 antibody [EPR8036(2)] ab181374

Recombinant RabMAb

2 References 4 Images

Overview

Product name	Anti-Connexin 32 / GJB1 antibody [EPR8036(2)]
Description	Rabbit monoclonal [EPR8036(2)] to Connexin 32 / GJB1
Host species	Rabbit
Tested applications	**Suitable for:** WB, Flow Cyt, IHC-P **Unsuitable for:** ICC/IF or IP
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	Human skeletal muscle, fetal liver, MCF-7 and Human stomach lysates; Human kidney tissue; MCF-7 cells.
General notes	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**. Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

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	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

	supernatant
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR8036(2)
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab181374 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		1/1000 - 1/5000. Predicted molecular weight: 32 kDa.
Flow Cyt		1/10 - 1/100. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Application notes Is unsuitable for ICC/IF or IP.

Target

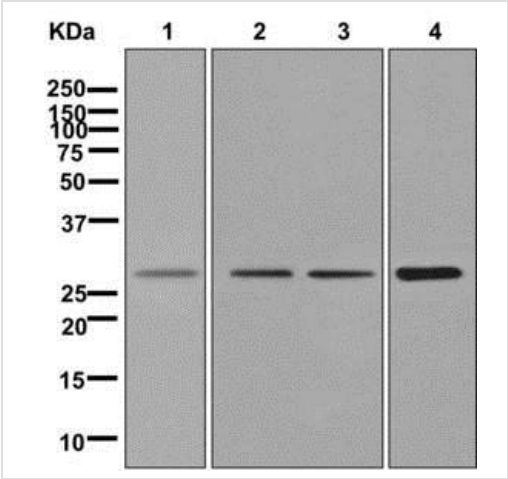
Function One gap junction consists of a cluster of closely packed pairs of transmembrane channels, the connexons, through which materials of low MW diffuse from one cell to a neighboring cell.

Involvement in disease Defects in GJB1 are the cause of Charcot-Marie-Tooth disease X-linked type 1 (CMTX1) [MIM:302800]; also designated CMT-X. CMTX1 is a form of Charcot-Marie-Tooth disease, the most common inherited disorder of the peripheral nervous system. Charcot-Marie-Tooth disease is classified in two main groups on the basis of electrophysiologic properties and histopathology: primary peripheral demyelinating neuropathies characterized by severely reduced motor nerve conduction velocities (NCVs) (less than 38m/s) and segmental demyelination and remyelination, and primary peripheral axonal neuropathies characterized by normal or mildly reduced NCVs and chronic axonal degeneration and regeneration on nerve biopsy. CMTX1 has both demyelinating and axonal features. Central nervous system involvement may occur.
Defects in GJB1 may contribute to the phenotype of Dejerine-Sottas syndrome (DSS) [MIM:145900]; also known as Dejerine-Sottas neuropathy (DSN) or hereditary motor and sensory neuropathy III (HMSN3). DSS is a severe degenerating neuropathy of the demyelinating Charcot-Marie-Tooth disease category, with onset by age 2 years. DSS is characterized by motor and sensory neuropathy with very slow nerve conduction velocities, increased cerebrospinal fluid protein concentrations, hypertrophic nerve changes, delayed age of walking as well as areflexia. There are both autosomal dominant and autosomal recessive forms of Dejerine-Sottas syndrome.

Sequence similarities Belongs to the connexin family. Beta-type (group I) subfamily.

Cellular localization Cell membrane. Cell junction > gap junction.

Images



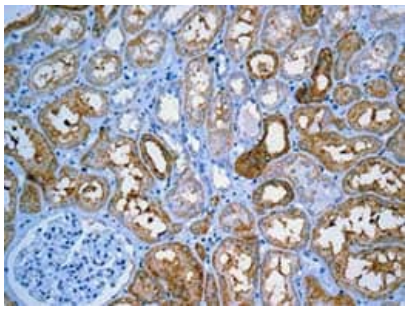
Western blot - Anti-Connexin 32 / GJB1 antibody [EPR8036(2)] (ab181374)

All lanes : Anti-Connexin 32 / GJB1 antibody [EPR8036(2)] (ab181374) at 1/1000 dilution

Lane 1 : Human skeletal muscle lysate
Lane 2 : Fetal liver tissue lysate
Lane 3 : MCF-7 lysate
Lane 4 : Human stomach lysate

Lysates/proteins at 10 µg per lane.

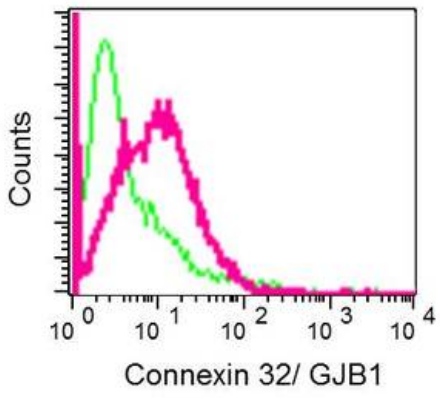
Predicted band size: 32 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Connexin 32 / GJB1 antibody [EPR8036(2)] (ab181374)

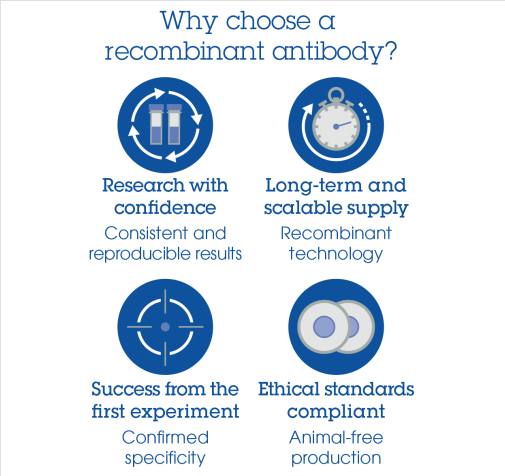
Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling Connexin 32 / GJB1 with ab181374 at 1/100 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Flow Cytometry - Anti-Connexin 32 / GJB1 antibody [EPR8036(2)] (ab181374)

Flow cytometric analysis of MCF-7 cells labeling Connexin 32 / GJB1 with ab181374 at 1/10 dilution (red) compared to a rabbit IgG negative control (green).



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