abcam

Product datasheet

Anti-Connexin 43 / GJA1 (phospho S368) antibody ab30559

★★★★★ 1 Abreviews 13 References 1 Image

Overview

Product name Anti-Connexin 43 / GJA1 (phospho S368) antibody

Description Rabbit polyclonal to Connexin 43 / GJA1 (phospho S368)

Host species Rabbit

Specificity Specific for ~43k Connexin43 protein phosphorylated at Ser368.

Tested applications Suitable for: WB

Species reactivity Reacts with: Mouse, Rat, Human

Predicted to work with: Non human primates

Immunogen Synthetic peptide corresponding to Rat Connexin 43/ GJA1 (phospho S368).

Positive control Rat hippocampal lysate.

General notesThe 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.

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

Properties

Form Liquid

Storage instructions Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer pH: 7.50

Constituents: 0.238% HEPES, 50% Glycerol, 0.87% Sodium chloride, 0.01% BSA

Purity Immunogen affinity purified

Purification notes Prepared from rabbit serum by affinity purification via sequential chromatography on phospho and

dephosphopeptide affinity columns.

Clonality Polyclonal

Isotype IgG

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Applications

The Abpromise quarantee

Our Abpromise guarantee covers the use of ab30559 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)	1/1000. Detects a band of approximately 43 kDa (predicted molecular weight: 42 kDa). The immunolabeling of Connexin43 is completely eliminated by treatment with lambda phosphatase.

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. May play a critical role in the physiology of hearing by participating in the recycling of potassium to the cochlear endolymph.

Tissue specificity

Involvement in disease

Expressed in the heart and fetal cochlea.

Defects in GJA1 are the cause of autosomal dominant oculodentodigital dysplasia (ODDD) [MIM:164200]; also known as oculodentoosseous dysplasia. ODDD is a highly penetrant syndrome presenting with craniofacial (ocular, nasal, dental) and limb dysmorphisms, spastic paraplegia, and neurodegeneration. Craniofacial anomalies tipically include a thin nose with hypoplastic alae nasi, small anteverted nares, prominent columnella, and microcephaly. Brittle nails and hair abnormalities of hypotrichosis and slow growth are present. Ocular defects include microphthalmia, microcornea, cataracts, glaucoma, and optic atrophy. Syndactyly type 3 and conductive deafness can occur in some cases. Cardiac abnormalities are observed in rare instances.

Defects in GJA1 are the cause of autosomal recessive oculodentodigital dysplasia (ODDD autosomal recessive) [MIM:257850].

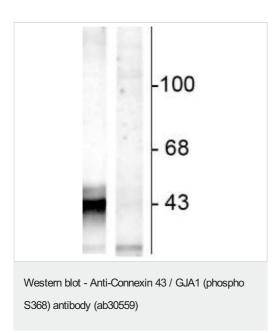
Defects in GJA1 may be the cause of syndactyly type 3 (SDTY3) [MIM:186100]. Syndactyly is an autosomal dominant trait and is the most common congenital anomaly of the hand or foot. It is marked by persistence of the webbing between adjacent digits, so they are more or less completely attached. In this type there is usually complete and bilateral syndactyly between the fourth and fifth fingers. Usually it is soft tissue syndactyly but occasionally the distal phalanges are fused. The fifth finger is short with absent or rudimentary middle phalanx. The feet are not affected. Defects in GJA1 are a cause of hypoplastic left heart syndrome (HLHS) [MIM:241550]. HLHS refers to the abnormal development of the left-sided cardiac structures, resulting in obstruction to blood flow from the left ventricular outflow tract. In addition, the syndrome includes underdevelopment of the left ventricle, aorta, and aortic arch, as well as mitral atresia or stenosis. Defects in GJA1 are a cause of Hallermann-Streiff syndrome (HSS) [MIM:234100]. HSS is a disorder characterized by a typical skull shape (brachycephaly with frontal bossing), hypotrichosis, microphthalmia, cataracts, beaked nose, micrognathia, skin atrophy, dental anomalies and proportionate short stature. Mental retardation is present in a minority of cases.

Sequence similarities

Cellular localization

Belongs to the connexin family. Alpha-type (group II) subfamily.

Cell membrane. Cell junction > gap junction.



All lanes : Anti-Connexin 43 / GJA1 (phospho S368) antibody (ab30559) at 1/1000 dilution

Lane 1: Rat hippocampal lysate

Lane 2: Rat hippocampal lysate (lambda phosphatase treated)

Lysates/proteins at 10 µg per lane.

Predicted band size: 42 kDa Observed band size: 43 kDa

The phosphospecificity of this labeling is shown in the second lane which was incubated in lambda phosphatase (1200 units for 30 min) before being exposed to GJA1.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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