abcam

Product datasheet

Anti-Connexin 43 / GJA1 antibody ab117843

★★★★★ 3 Abreviews 2 References 3 图像

概述

产品名称 Anti-Connexin 43 / GJA1抗体

描述 兔多克隆抗体to Connexin 43 / GJA1

宿主 Rabbit

经测试应用 适用于: IHC-P. WB 种属反应性 与反应: Mouse, Rat

预测可用于: Chicken 📤

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

常规说明 The 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 guestions, 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

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

存储溶液 pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

纯度 Immunogen affinity purified

克隆 多克隆 同种型 lgG

The Abpromise guarantee

Abpromise™承诺保证使用ab117843于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度:实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-P	****(1)	Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB	★★★☆☆(1)	Use a concentration of 1 µg/ml. Detects a band of approximately 43 kDa (predicted molecular weight: 43 kDa).

靶标

功能

组织**特异性**

疾病相关

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.

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].

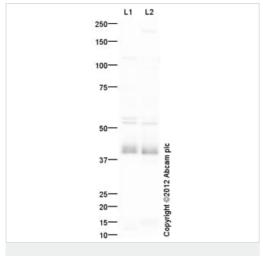
Defects in GJA1 may be the cause of syndactyly type 3 (SDTY3) [MIM:186100]. Syndactyly is an autosomal dominant trait and is the most common congenital anomaly of the hand or foot. It is marked by persistence of the webbing between adjacent digits, so they are more or less completely attached. In this 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.

序列相似性

细胞定位

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

Cell membrane. Cell junction > gap junction.



Western blot - Anti-Connexin 43 / GJA1 antibody (ab117843)

All lanes : Anti-Connexin 43 / GJA1 antibody (ab117843) at 1 $\mu g/ml$

Lane 1 : Heart (Mouse) Tissue Lysate

Lane 2: Heart (Rat) Tissue Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

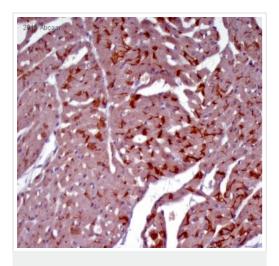
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 43 kDa

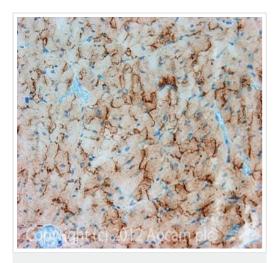
Exposure time: 1 minute

Immunohistochemical analysis of PFA-fixed paraffin-embedded rat cardiac tissue sections, labelling Conexin 43 with ab117843 at a dilution of 1/500 incubated for 12 hours at 4°C in 1% BSA in TBS. Antigen retrival was via Tris-EDTA pH 9.0 (heat mediated). Blocking was 3% BSA incubated for 1 hour at 37°C. The secondary was **ab6721** at 1/500.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Connexin 43 / GJA1 antibody (ab117843)

Image is courtesy of an Abreview submitted by Dr Helder Fonseca.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Connexin 43 / GJA1 antibody (ab117843)

IHC image of Connexin 43 / GJA1 staining in Mouse normal heart formalin fixed paraffin embedded tissue section, performed on a Leica BondTM system using the standard protocol B. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab117843, 1µg/ml, for 15 mins at room temperature. A Goat anti-Rabbit biotinylated secondary antibody was used to detect the primary, and visualized using an HRP conjugated ABC system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

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