



Mouse Monoclonal Antibody **Connexin 43** conjugated to Sepharose Beads

CatalogNo: **ANT8301-S**

Size 200ul

Storage Store at 4 °C for frequent use

Description

This Antagene antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated sepharose beads. It is useful for immunoprecipitation assays.

Connexin 43 (ANT0067R) Rabbit mAb

Formulation: 50% slurry in PBS pH 7.2 with 0.01mg NaN₃ preservative.

Host Species

- Rabbit
- Human, Mouse, Rat,

Reactivity

- WB, IHC, IF, IP, ELISA

Applications

MW

- 43kD (Calculated)
- 43kD (Observed)
- IgG, Kappa

Isotype

Recommended Dilution Ratios

IP

Basic Information

Clonality Monoclonal

Clone Number ANT0067R

Immunogen Information

Specificity Endogenous

Target Information

Gene name GJA1

Protein Name Gap junction alpha-1 protein

Organism	Gene ID	UniProt ID
Human	2697;	P17302;
Mouse	14609;	P23242;
Rat	24392;	P08050;

Cellular Membrane

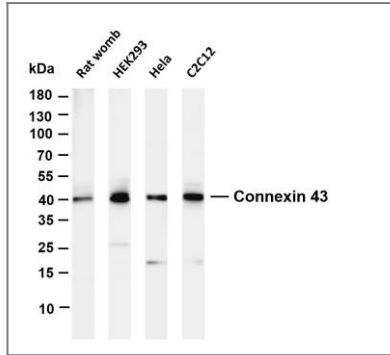
Localization

Tissue specificity Expressed in the heart and fetal cochlea.

Function

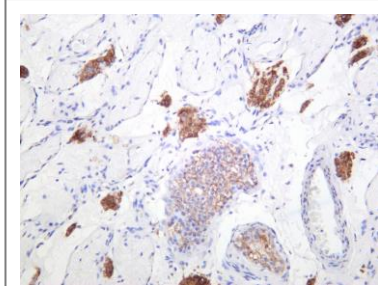
Caution:PubMed:11741837 reported 2 mutations (Phe-11 and Ala-24) linked to nonsyndromic autosomal recessive deafness (DFNBG). These mutations have subsequently been shown (PubMed:12457340) to involve the pseudogene of connexin-43 located on chromosome 5.,Caution:PubMed:7715640 reported a mutation Pro-364 linked to congenital heart diseases. This was later shown (PubMed:8873667) to be an artifact.,disease: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.,disease: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 typically 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 III and conductive deafness can occur in some cases. Cardiac abnormalities are observed in rare instances.,disease:Defects in GJA1 may be the cause of syndactyly type III (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.,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.,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.,similarity:Belongs to the connexin family.,similarity:Belongs to the connexin family. Alpha-type (group II) subfamily.,subunit:A connexon is composed of a hexamer of connexins.,subunit:A connexon is composed of a hexamer of connexins. Interacts with SGSM3. Interacts with KIAA1432/CIP150.,tissue specificity:Expressed in the heart and fetal cochlea.,

Validation Data

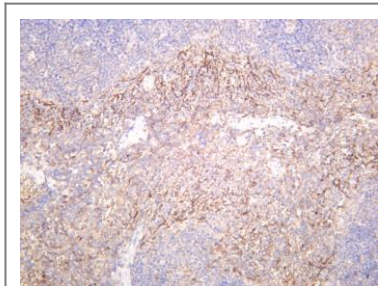


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Connexin 43 (ANT0067R) antibody. The HRPconjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Rat womb Lane 2: HEK293 Lane 3: Hela Lane 4: C2C12

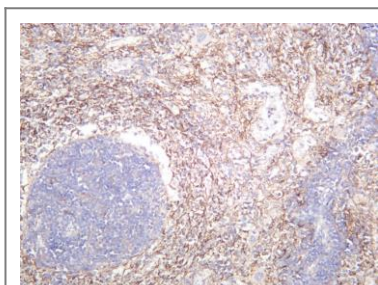
Predicted band size: 43kDa Observed band size: 43kDa



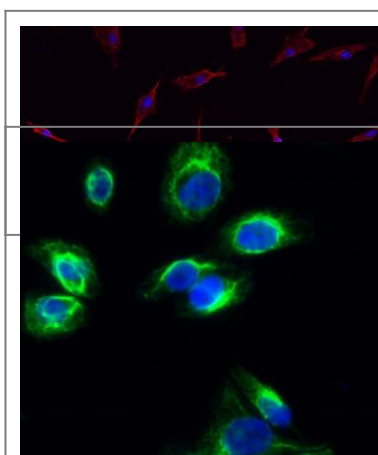
Human testis was stained with anti-Connexin 43 (ANT0067R) rabbit antibody



Mouse spleen was stained with anti-Connexin 43 (ANT0067R) rabbit antibody



Rat spleen was stained with anti-Connexin 43 (ANT0067R) rabbit antibody



Immunofluorescence analysis of A549. 1,primary Antibody(red) was diluted at 1:200(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000(room temperature, 50min).3, Picture B: DAPI(blue) 10min.

Immunofluorescence analysis of Hela cell. 1,Connexin 43 Antibody(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog:RS3211 was diluted at 1:1000(room temperature, 50min). 3

DAPI(blue) 10min.

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