Product Information Sheet

Polyclonal Anti-Connexin 43

Catalogue No. PA1026

Lot No. 05L01

Ig type: rabbit IgG

Size: 100µg/vial

Specificity

Human, mouse, rat.

No cross reactivity with other proteins.

Recommended application

Western blot

Immunohistochemistry(P)

Immunocytochemistry

Immunogen

A peptide mapping at the C-terminus of human Connexin 43, identical to the related rat and mouse sequence.

Purity

Immunogen affinity purified.

Application

Western blot

At 2µg/ml with the appropriate system to detect Connexin 43 in cells and tissues.

Immunohistochemistry(P)

At 1-2µg/ml to detect Connexin 43 in formalin fixed and paraffin embedded tissues. Digesting the sections is required.

Immunocytochemistry Suitable

Other applications have not been tested.

Optimal dilutions should be determined by end user.

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na_2HPO_4, 0.05mg Thimerosal, 0.05mg NaN_3.

Reconstitution

0.2ml of distilled water will yield a concentration of 500µg/ml.

To reorder contact us at:

Antagene, Inc.

Toll Free: 1(866)964-2589

email: Info@antageneinc.com

Storage

At -20˚C for one year. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for longer time.

.

BACKGROUND

Connexins 43 (Cx43), also called GAP Junction Protein, alpha-1(GJA1). Connexin 43 is a member of the connexin gene family which abundantly expressed in the heart and liver and was mapped to 6q21-q23.2. Connexin43, the major protein of gap junctions in the heart, is targeted by several protein kinases that regulate myocardial cell-cell coupling. Mutations in the connexin43 gap-junction gene, which lead to abnormally regulated cell-cell communication, are associated with visceroatrial heterotaxia. Cx43 must also play a critical role in the physiology of hearing, presumably by participating in the recycling of potassium to the cochlear endolymph.

REFERENCE

1. Britz-Cunningham, S. H.; Shah, M. M.; Zuppan, C. W.; Fletcher, W. H. : Mutations of the connexin43 gap-junction gene in patients with heart malformations and defects of laterality. New Eng. J. Med. 332: 1323-1329, 1995.

2. Liu, X. Z.; Xia, X. J.; Adams, J.; Chen, Z. Y.; Welch, K. O.; Tekin, M.; Ouyang, X. M.; Kristiansen, A.; Pandya, A.; Balkany, T.; Arnos, K. S.; Nance, W. E. : Mutations in GJA1 (connexin 43) are associated with non-syndromic autosomal recessive deafness. Hum. Molec. Genet. 10: 2945-2951, 2001.