FabGennix International, Inc.
9191 Kyser Way Bldg. 4 Suite 402
Frisco, TX 75033

Tel: (214)-387-8105, 1-800-786-1236 Fax: (214)-387-8105 Email: info@fabgennix.com Web: www.FabGennix.com

Rabbit Polyclonal Anti-Usherin antibody

Catalog Number: USH-121AP

Lot Number:

General Information

Product	Usherin Antibody
Description	Usherin isoform A Antibody C-epitope
Accession #	Uniprot: O75445 NCBI: NP_009054.5
Verified Applications	CM, ELISA, ICC, IF, IHC, IP, WB
Species Cross Reactivity	Human
Host	Rabbit
Immunogen	Synthetic peptide taken within amino acid region 150-180 on Usher Type 2A protein.
Alternative Nomenclature	dJ1111A8.1 antibody, US1 antibody, USH1A antibody, Usher syndrome type Ia protein antibody, Usherin antibody

Physical Properties

Quantity	100 µg
Volume	200 µl
Form	Affinity Purified Immunoglobulins
Immunoglobulin & Concentration	0.62 mg/ml IgG in antibody stabilization buffer
Determinant	C-epitope
Storage	Store at -20ºC for long term storage.

Recommended Dilutions

DOT Blot	1:4,000
ELISA	1:4,000
Immunocytochemistry	1:250
Immunofluorescence	1:250
Immunohistochemistry	1:250
Immunoprecipitation	1:200
Western Blot	1:500

Related Products	Catalog #
BIOTIN-Conjugated	USH.121-BIOTIN
FITC-Conjugated	USH.121-FITC
Antigenic Blocking Peptide	P-USH.121
Western Blot Positive Control	PC-USH
N-epitope	USH-101AP
Mid Region epitope	USH-112AP

Overview:

Usher syndrome, an autosomal recessive heterogeneous disorder, is the most common cause of deafness and blindness in adults and affects 3-6% children born with hearing impairment. The affected individuals have sensory-neural deficiencies at birth and subsequently develop progressive retinitis pigmentosa (RP). Three forms of Usher syndrome have been characterized, Usher Type I, II and III which can be distinguish based on severity of hearing loss and vestibular involvement. Type I patIents are profoundly deaf while type II (most common form of Usher syndrome) patients are mildly deaf but have normal vestibular responses (1). Ush2A gene has been mapped on a 1 mega base pair interval between marker D1S474 and AFM144XF2. The Usher 2A gene expresses an extra cellular matrix protein that resembles unconventional Myosin and do not appear to have any un-conventional functional correlations. The human Usher Syndrome 2A (Ush2A) protein has 1272 amino acid (Approximate MW 153kDa) with several functional domains (Laminin type EGF like domain; Laminin-Type epidermal growth factor like domain and fibronectin type 3 like domain). The protein has a single transmembrane domain that anchor the protein to the cell membrane, the rest of the protein stays outside the cell.

The Ush2A protein is approximately 153kDa (1272 amino acids) with multiple conserved domains that is mainly expressed in RPEs. The Anti-Usherin-selective antibodies were generated against three regions: N-epitope, Mid-Region and C-epitope. These epitope are unique to Usherin protein. The polyclonal antibody strongly labels a 186kDa protein in RPE cell extracts. Anti-Ush2A-selective antibodies are also available in affinity-purified form for confocal, Western blotting and immunocytochemical analyses. Antibodies can be conjugated with fluorescent probes or secondary enzymes for an extra charge. Western blot positive control in ready-to-use SDS sample buffer and antigenic blocking peptides are available.

References:

1. Judy JD., Weston M. D., Yao S. F., Hoover D. M. et. Al., Mutation of a gene encoding a protein with extracellular matrix motifs in Usher syndrome Type IIa. Science 280, 1753-1757; 1998.
2. Farooqui, S. M., Brock. W. J., A. Hamdi., Prasad. C. (1991) J. Neurochem. 57, 1363-1369.

* For users who may require large amounts of the products listed above, please inquire about bulk material discounts.