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# Connexin-32 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP55281

## Product Information

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| **Application** | IHC-P, IHC-F, IF, E |
| **Primary Accession** | P08034 |
| **Reactivity** | Rat, Pig, Dog, Bovine |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 32025 |
| **Physical State** | Liquid |
| **Immunogen** | KLH conjugated synthetic peptide derived from human Connexin-32 |
| **Epitope Specificity** | 201-283/283 |
| **Isotype** | IgG |
| **Purity** | affinity purified by Protein A |
| **Buffer** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| **SUBCELLULAR LOCATION** | Cell membrane; Multi-pass membrane protein. Cell junction, gap junction. |
| **SIMILARITY** | Belongs to the connexin family. Beta-type (group I) subfamily. |
| **SUBUNIT** | A connexon is composed of a hexamer of connexins. Interacts with CNST. |
| **DISEASE** | Defects in GJB1 are the cause of Charcot-Marie-Tooth disease X-linked type 1 (CMTX1) [MIM:302800]; also designated CMT-X. CMTX1 is a form of Charcot-Marie-Tooth disease, the most common inherited disorder of the peripheral nervous system. Charcot-Marie-Tooth disease is classified in two main groups on the basis of electrophysiologic properties and histopathology: primary peripheral demyelinating neuropathies characterized by severely reduced motor nerve conduction velocities (NCVs) (less than 38m/s) and segmental demyelination and remyelination, and primary peripheral axonal neuropathies characterized by normal or mildly reduced NCVs and chronic axonal degeneration and regeneration on nerve biopsy. CMTX1 has both demyelinating and axonal features. Central nervous system involvement may occur.Defects in GJB1 may contribute to the phenotype of Dejerine-Sottas syndrome (DSS) [MIM:145900]; also known as Dejerine-Sottas neuropathy (DSN) or hereditary motor and sensory neuropathy III (HMSN3). DSS is a severe degenerating neuropathy of the demyelinating Charcot-Marie-Tooth disease category, with onset by age 2 years. DSS is characterized by motor and sensory neuropathy with very slow nerve conduction velocities, increased cerebrospinal fluid protein concentrations, hypertrophic nerve changes, delayed age of walking as well as areflexia. There are both autosomal dominant and autosomal recessive forms of Dejerine-Sottas syndrome. |
| **Important Note** | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| **Background Descriptions** | Vascular smooth muscle connexin-32 is a member of the connexin gene family. The encoded protein is a component of gap junctions, which are composed of arrays of intercellular channels that provide a route for the diffusion of low molecular weight materials from cell to cell. The protein is the major protein of gap junctions in the heart that are thought to have a crucial role in the synchronized contraction of the heart and in embryonic |

development. Mutations in this gene have been associated with oculodentodigital dysplasia and heart malformations.

## Additional Information

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| **Gene ID** | 2705 |
| **Other Names** | Gap junction beta-1 protein, Connexin-32, Cx32, GAP junction 28 kDa liver protein, GJB1, CX32 |
| **Dilution** | IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000 |
| **Format** | 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce |
| **Storage** | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |

## Protein Information

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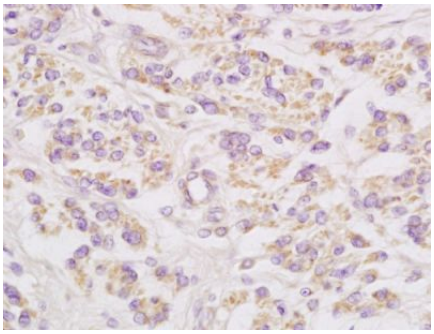
| **Name** | GJB1 |
| **Synonyms** | CX32 |
| **Function** | One gap junction consists of a cluster of closely packed pairs of transmembrane channels, the connexons, through which materials of low MW diffuse from one cell to a neighboring cell. |
| **Cellular Location** | Cell membrane; Multi-pass membrane protein. Cell junction, gap junction |

## Images



Tissue/cell: human cervical carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-Connexin-32 Polyclonal Antibody, Unconjugated(AP55281) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining