

## Immunotag™ Fyn Monoclonal Antibody

| Antibody Specification |                                                                                                                                                                    |
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| Catalog No.            | ITM0290                                                                                                                                                            |
| Product Description    | Immunotag™ Fyn Monoclonal Antibody                                                                                                                                 |
| Size                   | 50 µg, 100 µg                                                                                                                                                      |
| Conjugation            | HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647                                      |
| IMPORTANT NOTE         | This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return. |
| Target Protein         | Fyn                                                                                                                                                                |
| Clonality              | Monoclonal                                                                                                                                                         |
| Storage/Stability      | -20°C/1 year                                                                                                                                                       |
| Application            | WB,ELISA                                                                                                                                                           |
| Recommended Dilution   | Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.                                                                                |
| Concentration          | 1 mg/ml                                                                                                                                                            |
| Reactive Species       | Human,Mouse                                                                                                                                                        |
| Host Species           | Mouse                                                                                                                                                              |
| Immunogen              | Purified recombinant fragment of human Fyn expressed in E. Coli.                                                                                                   |
| Specificity            | Fyn Monoclonal Antibody detects endogenous levels of Fyn protein.                                                                                                  |
| Purification           | Affinity purification                                                                                                                                              |
| Form                   | Ascitic fluid containing 0.03% sodium azide.                                                                                                                       |
| Gene Name              | FYN                                                                                                                                                                |
| Accession No.          | P06241 P39688                                                                                                                                                      |
| Alternate Names        | FYN; Tyrosine-protein kinase Fyn; Proto-oncogene Syn; Proto-oncogene c-Fyn; Src-like kinase; SLK; p59-Fyn                                                          |

## Antibody Specification

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| Description                 | FYN proto-oncogene, Src family tyrosine kinase(FYN) Homo sapiens This gene is a member of the protein-tyrosine kinase oncogene family. It encodes a membrane-associated tyrosine kinase that has been implicated in the control of cell growth. The protein associates with the p85 subunit of phosphatidylinositol 3-kinase and interacts with the fyn-binding protein. Alternatively spliced transcript variants encoding distinct isoforms exist. [provided by RefSeq, Jul 2008],                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Cell Pathway/<br>Category   | Axon guidance,Focal adhesion,Adherens_Junction,Natural killer cell mediated cytotoxicity,T_Cell_Receptor,Fc epsilon RI,Prion diseases,Pathogenic Escherichia coli infection,Viral myocarditis,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Protein<br>Expression       | Blood,Lung,Placenta,Platelet,T-cell,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Subcellular<br>Localization | nucleus,mitochondrion,endosome,cytosol,actin filament,plasma membrane,postsynaptic density,extrinsic component of cytoplasmic side of plasma membrane,membrane raft,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Protein Function            | catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate.,cofactor:Manganese.,enzyme regulation:Inhibited by phosphorylation of Tyr-531 by leukocyte common antigen and activated by dephosphorylation of this site.,function:Implicated in the control of cell growth. Plays a role in the regulation of intracellular calcium levels, with isoform 2 showing the greater ability to mobilize cytoplasmic calcium in comparison to isoform 1. Required in brain development and mature brain function with important roles in the regulation of axon growth, axon guidance, and neurite extension. Blocks axon outgrowth and attraction induced by NTN1 by phosphorylating its receptor DDC.,similarity:Belongs to the protein kinase superfamily. Tyr protein kinase family.,similarity:Belongs to the protein kinase superfamily. Tyr protein kinase family. SRC subfamily.,similarity:Contains 1 protein kinase domain.,similarity:Contains 1 SH2 domain.,similarity:Contains 1 SH3 domain.,subcellular location:Present and active in lipid rafts. Present in cell body and along the process of mature and developing oligodendrocytes.,subunit:Associates through its SH3 domain, to the p85 subunit of phosphatidylinositol 3-kinase. Interacts with the FYN-binding protein (FYB). Interacts with phosphorylated TOM1L1. Interacts with CD79A upon activation of the B-cell antigen receptor which increases FYN activity (By similarity). Interacts with PAG1. Interacts (via SH3 domain) with PRMT8. Interacts with SH2D1A and SLAMF1. Interacts (via SH3 domain) with HEV ORF3 protein.,tissue specificity:Isoform 1 is highly expressed in the brain, isoform 2 is expressed in cells of hemopoietic lineages, especially T lymphocytes., |
| Usage                       | For Research Use Only! Not for diagnostic or therapeutic procedures.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |