

# Immunotag™ Group VI iPLA2 Polyclonal Antibody

| Antibody Specification |                                                                                                                                                                                                                                                  |
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| Catalog No.            | ITT2073                                                                                                                                                                                                                                          |
| Product Description    | Immunotag™ Group VI iPLA2 Polyclonal 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         | Group VI iPLA2                                                                                                                                                                                                                                   |
| Clonality              | Polyclonal                                                                                                                                                                                                                                       |
| Storage/Stability      | -20°C/1 year                                                                                                                                                                                                                                     |
| Application            | WB,ELISA                                                                                                                                                                                                                                         |
| Recommended Dilution   | Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other applications.                                                                                                                                                               |
| Concentration          | 1 mg/ml                                                                                                                                                                                                                                          |
| Reactive Species       | Human,Mouse,Rat                                                                                                                                                                                                                                  |
| Host Species           | Rabbit                                                                                                                                                                                                                                           |
| Immunogen              | Synthesized peptide derived from the Internal region of human Group VI iPLA2                                                                                                                                                                     |
| Specificity            | Group VI iPLA2 Polyclonal Antibody detects endogenous levels of Group VI iPLA2 protein.                                                                                                                                                          |
| Purification           | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen                                                                                                                             |
| Form                   | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                          |
| Gene Name              | PLA2G6                                                                                                                                                                                                                                           |
| Accession No.          | O60733 P97819 P97570                                                                                                                                                                                                                             |
| Alternate Names        | PLA2G6; PLPLA9; 85/88 kDa calcium-independent phospholipase A2; Cal-PLA2; Group VI phospholipase A2; GVI PLA2; Intracellular membrane-associated calcium-independent phospholipase A2 beta; iPLA2-beta; Patatin-like phospholipase domain-contai |

## Antibody Specification

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| Description                 | phospholipase A2 group VI(PLA2G6) Homo sapiens The protein encoded by this gene is an A2 phospholipase, a class of enzyme that catalyzes the release of fatty acids from phospholipids. The encoded protein may play a role in phospholipid remodelling, arachidonic acid release, leukotriene and prostaglandin synthesis, fas-mediated apoptosis, and transmembrane ion flux in glucose-stimulated B-cells. Several transcript variants encoding multiple isoforms have been described, but the full-length nature of only three of them have been determined to date. [provided by RefSeq, Dec 2010],                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Cell Pathway/<br>Category   | Glycerophospholipid metabolism,Ether lipid metabolism,Arachidonic acid metabolism,Linoleic acid metabolism,alpha-Linolenic acid metabolism,MAPK_ERK_Growth,MAPK_G_Protein,Vascular smooth muscle contraction,VEGF,Fc epsilon RI,Fc gamma R-mediated phagocytosis,Long-term depression,GnRH,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Protein<br>Expression       | B-cell,Brain,Pancreatic islet,Testis,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Subcellular<br>Localization | extracellular space,cytoplasm,mitochondrion,microtubule organizing center,cytosol,membrane,integral component of membrane,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Protein Function            | catalytic activity:Phosphatidylcholine + H(2)O = 1-acylglycerophosphocholine + a carboxylate.,disease:Defects in PLA2G6 are a cause of neurodegeneration with brain iron accumulation (NBIA) [MIM:610217]. NBIA comprises a clinically and genetically heterogeneous group of disorders with high basal ganglia iron.,disease:Defects in PLA2G6 are the cause of infantile neuroaxonal dystrophy 1 (INAD1) [MIM:256600]; also known as Seitelberger disease. Infantile neuroaxonal dystrophy (INAD) is a neurodegenerative disease characterized by pathologic axonal swelling and spheroid bodies in the central nervous system. Onset is within the first 2 years of life with death by age 10 years.,disease:Defects in PLA2G6 are the cause of Karak syndrome [MIM:608395]. Karak syndrome is a neurologic disease characterized by early-onset progressive cerebellar ataxia, dystonia, spasticity, intellectual and features compatible with iron deposition in the putamen and substantia nigra.,function:Catalyzes the release of fatty acids from phospholipids. It has been implicated in normal phospholipid remodeling, nitric oxide-induced or vasopressin-induced arachidonic acid release and in leukotriene and prostaglandin production. May participate in fas mediated apoptosis and in regulating transmembrane ion flux in glucose-stimulated B-cells.,function:Isoform ankyrin-iPLA2-1 and isoform ankyrin-iPLA2-2, which lack the catalytic domain, are probably involved in the negative regulation of iPLA2 activity.,similarity:Contains 7 ANK repeats.,subunit:Forms large oligomeric 270-350 kDa structures.,tissue specificity:Four different transcripts were found to be expressed in a distinct tissue distribution., |
| Usage                       | For Research Use Only! Not for diagnostic or therapeutic procedures.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |