



# Anti-PTPLA (aa 33-66) polyclonal antibody (CABT-BL5466)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

|                              |   |
|------------------------------|---|
| <b>Product Overview</b>      | Rabbit polyclonal antibody to Human PTPLA.  |
| <b>Antigen Description</b>   | The protein encoded by this gene contains a characteristic catalytic motif of the protein tyrosine phosphatases (PTPs) family. The PTP motif of this protein has the highly conserved arginine residue replaced by a proline residue; thus it may represent a distinct class of PTPs. Members of the PTP family are known to be signaling molecules that regulate a variety of cellular processes. This gene was preferentially expressed in both adult and fetal heart. A much lower expression level was detected in skeletal and smooth muscle tissues, and no expression was observed in other tissues. The tissue specific expression in the developing and adult heart suggests a role in regulating cardiac development and differentiation. |
| <b>Specificity</b>           | Highly expressed in the myocardium, and to a lesser extent in skeletal and smooth muscular tissues including those from stomach, jejunum, and bladder.  |
| <b>Immunogen</b>             | Synthetic peptide conjugated to KLH, corresponding to a region within N terminal amino acids 33-66 of Human PTPLA.  |
| <b>Isotype</b>               | IgG   |
| <b>Source/Host</b>           | Rabbit  |
| <b>Species Reactivity</b>    | Human   |
| <b>Purification</b>          | Immunogen affinity purified   |
| <b>Conjugate</b>             | Unconjugated  |
| <b>Sequence Similarities</b> | Belongs to the very long-chain fatty acids dehydratase HACD family.   |
| <b>Cellular Localization</b> | Endoplasmic reticulum membrane.   |

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|---------------------|---|
| <b>Format</b>       | Liquid  |
| <b>Size</b>         | 100 µg  |
| <b>Buffer</b>       | 99% PBS   |
| <b>Preservative</b> | 0.09% Sodium Azide  |
| <b>Storage</b>      | Store at 4°C (up to 6 months). For long term storage store at -20°C |

## BACKGROUND

**Introduction** The protein encoded by this gene contains a characteristic catalytic motif of the protein tyrosine phosphatases (PTPs) family. The PTP motif of this protein has the highly conserved arginine residue replaced by a proline residue; thus it may represent a distinct class of PTPs. Members of the PTP family are known to be signaling molecules that regulate a variety of cellular processes. This gene was preferentially expressed in both adult and fetal heart. A much lower expression level was detected in skeletal and smooth muscle tissues, and no expression was observed in other tissues. The tissue specific expression in the developing and adult heart suggests a role in regulating cardiac development and differentiation. [provided by RefSeq, Jul 2008]

## GENE INFORMATION

|                            |   |
|----------------------------|---|
| <b>Entrez Gene ID</b>      | <a href="#">9200</a>  |
| <b>Protein Refseq</b>      | <a href="#">NP_055056</a>   |
| <b>UniProt ID</b>          | <a href="#">B0YJ81</a>  |
| <b>Chromosome Location</b> | 10p14-p13   |
| <b>Pathway</b>             | Biosynthesis of unsaturated fatty acids, organism-specific biosystem; Biosynthesis of unsaturated fatty acids, conserved biosystem; Fatty acid biosynthesis, elongation, endoplasmic reticulum, organism-specific biosystem; Fatty acid biosynthesis, elongation, endoplasmic reticulum, conserved biosystem; Fatty acid elongation, organism-specific biosystem; Fatty acid elongation, conserved biosystem; |
| <b>Function</b>            | lyase activity; protein tyrosine phosphatase activity;  |