5 Lipoygenase
Polyclonal ANTIBODY
Catalog Number: 10021-1-Ig

Basic Information

- **Catalog Number:** 10021-1-Ig
- **Size:** 75 μg/150 μl
- **Source:** Rabbit
- **Isotype:** IgG
- **Purification Method:** Protein A purification

**GenBank Accession Number:** BC130332
**GeneID (NCBI):** 240
**Full Name:** arachidonate 5-lipoxygenase
**Calculated MW:** 674aa, 78 kDa
**Observed MW:** ~70 kDa

**Recommended Dilutions:**
- **WB:** 1:500-1:1000
- **IF:** 1:10-1:100

**Recommended Buffer:** PBS with 0.1% sodium azide and 50% glycerol pH 7.3

**Storage:** Store at -20°C. Stable for one year after shipment.
**Aliquoting is unnecessary for -20°C storage**

**Applications**
- **Tested Applications:** ELISA, IF, WB
- **Cited Applications:** WB
- **Species Specificity:** human, mouse
- **Positive Controls:**
  - **WB:** HL-60 cells; DU 145 cells
  - **IF:** Hela cells;

**Background Information**

ALOX5 (arachidonate 5-lipoxygenase) is also named as LO5, 5-LO and belongs to the lipoxygenase family. It catalyzes the first step in leukotriene biosynthesis and plays a role in inflammatory processes. It is a 78 kDa iron-containing enzyme that translocates from the cytosol to associate with FLAP, and converts arachidonate in two steps into the unstable intermediate LTA4. It is essential for cysteinyl-leukotriene (cys-LT) production, critical mediators in asthma (PMID: 12911785).

**Notable Publications**

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<tr>
<th>Author</th>
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<th>Application</th>
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<tbody>
<tr>
<td>Sivalokanathan Sarveswaran</td>
<td>25875826</td>
<td>J Biol Chem</td>
<td>WB</td>
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<td>Sivalokanathan Sarveswaran</td>
<td>25642201</td>
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**For technical support and original validation data for this product please contact:**
- Tel: (888) 4PTGLAB (toll free in USA), or (312) 455-8498 (outside USA)
- E: proteintech@ptglab.com
- W: ptglab.com

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Selected Validation Data

Immunofluorescent analysis of HeLa cells, using ALOX5 antibody 10021-1-Ig at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).

HL-60 cells were subjected to SDS PAGE followed by western blot with 10021-1-Ig. Lipooxygenase antibody at dilution of 1:600 incubated at room temperature for 1.5 hours.