5 Lipoxygenase Polyclonal antibody

Catalog Number: 10021-1-Ig

Basic Information

- **Catalog Number:** 10021-1-Ig
- **Size:** 150μl, Concentration: 2000 μg/ml by Nanodrop and 527 μg/ml by Bradford method using BSA as the standard
- **Source:** Rabbit
- **Isotype:** IgG
- **GenBank Accession Number:** BC130332
- **GeneID (NCBI):** 240
- **Full Name:** arachidonate 5-lipoxygenase
- **Calculated MW:** 674 aa, 78 kDa
- **Observed MW:** 78 kDa
- **Purification Method:** Protein A purification
- **Recommended Dilutions:** WB 1:500-1:1000, IF 1:10-1:100

Applications

- **Tested Applications:** IF, WB, ELISA
- **Cited Applications:** IF, IHC, WB
- **Species Specificity:** human, mouse
- **Cited Species:** human, rat, mouse

Positive Controls:
- **WB:** DU 145 cells, HL-60 cells, K-562 cells, PC-3 cells, human placenta tissue
- **IF:** Hela cells

Background Information

ALOX5 (arachidonate 5-lipoxygenase) is also named as LOGS, 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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<td>Mei Zheng</td>
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Storage

- **Storage:** Store at -20°C. Stable for one year after shipment.
- **Storage Buffer:** PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
- **Aliquoting is unnecessary for -20°C storage.

*** 20ul sizes contain 0.1% BSA
Various lysates were subjected to SDS PAGE followed by western blot with 10021-1-Ig (5 Lipoygenase antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.

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