

Product datasheet for **TA336528**

5 Lipoxygenase (ALOX5) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	Western Blot: 1:500-1:1000, Simple Western: 10 ug/ml
Reactivity:	Human, Mouse, Rat, Bovine, Rabbit
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	A synthetic peptide made to a C-terminal region within residues 600-674 of human 5-Lipoxygenase. [Swiss-Prot# P09917]
Formulation:	PBS, 30% glycerol, 0.1% Sodium Azide. Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Concentration:	lot specific
Purification:	Immunogen affinity purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	80 kDa
Gene Name:	arachidonate 5-lipoxygenase
Database Link:	NP_000689 Entrez Gene 11689 Mouse Entrez Gene 25290 Rat Entrez Gene 240 Human P09917



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Background: 5-lipoxygenase (5LO) is a pro-inflammatory enzyme widely expressed in CNS where its level increases in an age-dependent manner and its activity is regulated by the presence/availability of FLAP (5LO activating protein) that form a functional complex with 5LO to catalyze arachidonic acid oxidation to produce lipid molecules with complex signaling properties such as leukotrienes. Reaction catalyzed by 5LO is considered as first step in the leukotriene biosynthesis and it is highly critical to inflammatory processes. Moreover, knockout of 5LO as well as FLAP has been shown to result in anxiety-like behavior in mice and 5LO is emerging as a new active player in Alzheimer's disease (AD) pathogenesis. 5LO levels are significantly increased in AD postmortem brain tissues and its genetic absence or pharmacological blockade both result in a significant reduction in the abeta levels as well as deposition in a transgenic mouse model of AD-like amyloidosis (i.e., Tg2576) mice.

Synonyms: 5-LO; 5-LOX; 5LPG; LOG5

Note: This 5 Lipoxygenase antibody is useful for Western Blot, where a band is seen at ~80 kDa. There may be some non-specific bands at non-interfering lower molecular weights.

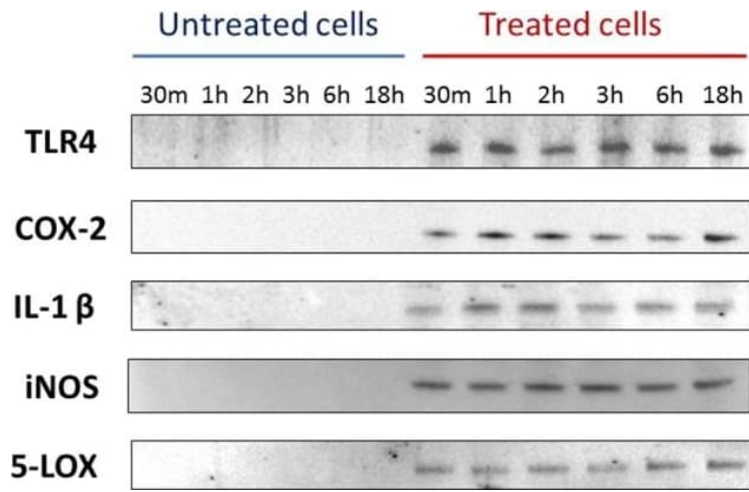
Protein Families: Druggable Genome

Protein Pathways: Arachidonic acid metabolism, Metabolic pathways

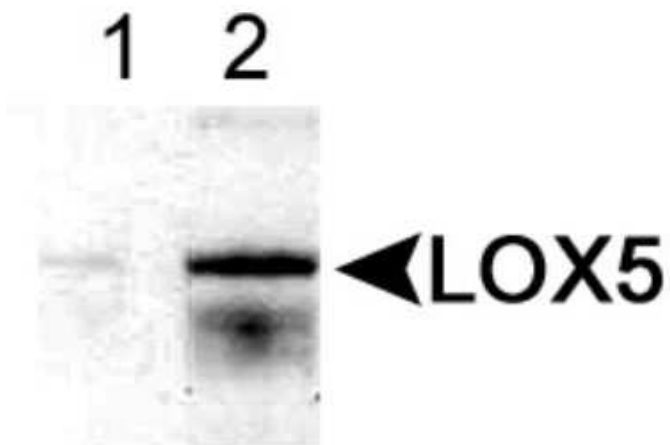
Product images:



Simple Western: 5-Lipoxygenase Antibody TA336528 - Simple Western lane view shows a specific band for 5-Lipoxygenase in 0.5 mg/ml of Human Lung lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system. * Non-specific interaction with the 230 kDa Simple Western standard may be seen with this antibody



Western blotting data for TLR4, COX-2, IL-1β, iNOS, 5-LOX. Data are representative of three independent experiment.



Western Blot: 5-Lipoxygenase Antibody TA336528 - Detection of LOX5 in human peripheral leukocytes using TA336528 at 0.5(Lane 1) and 2.0 ug/ml (Lane 2).