bs-0526R **[Primary Antibody]**

ALOX5 Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 240 **SWISS:** P09917

Target: ALOX5

Immunogen: KLH conjugated synthetic peptide derived from human ALOX5: 601-674/674.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: This gene encodes a member of the lipoxygenase gene family and plays a dual role in the synthesis of leukotrienes from arachidonic acid. The encoded protein, which is expressed specifically in bone marrow-derived cells, catalyzes the conversion of arachidonic acid to 5(S)-hydroperoxy-6-trans-8,11,14-cis-eicosatetraenoic acid, and further to the allylic epoxide 5(S)-trans-7,9-trans-11,14-cis-eicosatetrenoic acid (leukotriene A4). Leukotrienes are important mediators of a number of inflammatory and allergic conditions. Mutations in the promoter region of this gene lead to a diminished response to antileukotriene drugs used in the treatment of asthma and may also be associated with atherosclerosis and several cancers. Alternatively spliced transcript variants have been observed, but their full-length nature has not been determined.

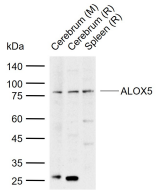
Applications: **WB** (1:500-2000)
Flow-Cyt (1μg/Test)

Reactivity: Human, Mouse, Rat (predicted: Rabbit, Pig, Cow, Dog, Horse)

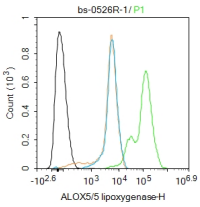
Predicted MW.: 78 kDa

Subcellular Location: Cell membrane ,Cytoplasm ,Nucleus

VALIDATION IMAGES



Sample: Lane 1: Mouse Cerebrum tissue lysates Lane 2: Rat Cerebrum tissue lysates Lane 3: Rat Spleen tissue lysates Primary: Anti-ALOX5 (bs-0526R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 78 kDa Observed band size: 78 kDa



Blank control（black line）:A431. Primary Antibody (green line): Rabbit Anti-ALOX5/5 lipoxygenase antibody (bs-0526R) Dilution:1ug/Test; Secondary Antibody（white blue line）: Goat anti-rabbit IgG-AF488 Dilution: 0.5ug/Test. Isotype control（orange line）: Normal Rabbit IgG Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20°C, The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

SELECTED CITATIONS

- **[IF=5.895]** Hui Wang. et al. Effect of Chlorogenic Acid via Upregulating Resolvin D1 Inhibiting the NF-κB Pathway on Chronic Restraint Stress-Induced Liver Inflammation. J AGR FOOD CHEM. 2022;70(34):10532–10542 WB,IHC ;Rat. 35975781
- **[IF=5.4]** Yahui Dong. et al. Zhisou powder displays therapeutic effect on chronic bronchitis through inhibiting PI3K/Akt/HIF-1α/VEGFA signaling pathway and reprograming metabolic pathway of arachidonic acid. J ETHNOPHARMACOL. 2024 Jan;319:117110 WB,IHC,IF ;Rat. 37673198
- **[IF=4.2]** Yang Zhang. et al.Screening and Validation of Potential Biomarkers of Immune Cells in Childhood Asthma Patients via Mendelian Randomization and Machine Learning.journal of inflammation research.2025 Feb 21:18:2583-2600. Western blot ;Mouse. 4000808
- **[IF=4.12]** Wang et al. Kukoamine A inhibits human glioblastoma cell growth and migration through apoptosis induction and epithelial-mesenchymal transition attenuation. (2016) Sci.Rep. 6:36543 WB ;Human. 27824118
- **[IF=3.905]** Xinmiao Wang. et al. Caffeic acid attenuates irradiation-induced hematopoietic stem cell apoptosis through inhibiting mitochondrial damage. Exp Cell Res. 2021 Dec;409:112934 FCM ;Mouse. 34801561