

## Product datasheet for **CF807011**

### 5 Lipoxygenase (ALOX5) Mouse Monoclonal Antibody [Clone ID: OTI2C5]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI2C5
Applications:	IHC, WB
Recommended Dilution:	WB 1:2000
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Human recombinant protein fragment corresponding to amino acids 18-364 of human ALOX5(NP_000689) produced in E.coli.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	77.8 kDa
Gene Name:	arachidonate 5-lipoxygenase
Database Link:	<a href="#">NP_000689</a> <a href="#">Entrez Gene 11689 Mouse</a> <a href="#">Entrez Gene 25290 Rat</a> <a href="#">Entrez Gene 240 Human</a> <a href="#">P09917</a>



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**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-eicosatetraenoic 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 encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2012]

**Synonyms:**

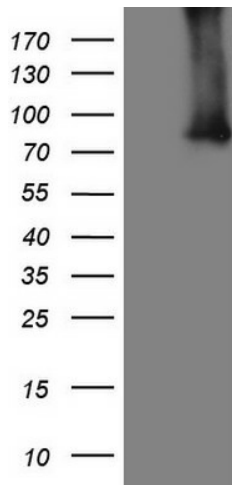
5-LO; 5-LOX; 5LPG; LOG5

**Protein Families:**

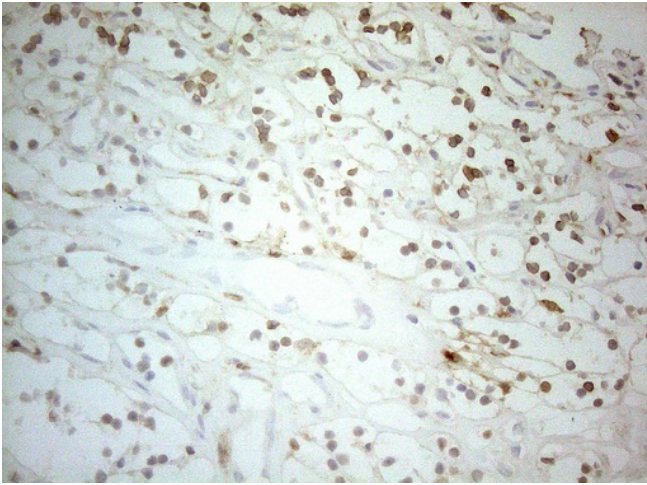
Druggable Genome

**Protein Pathways:**

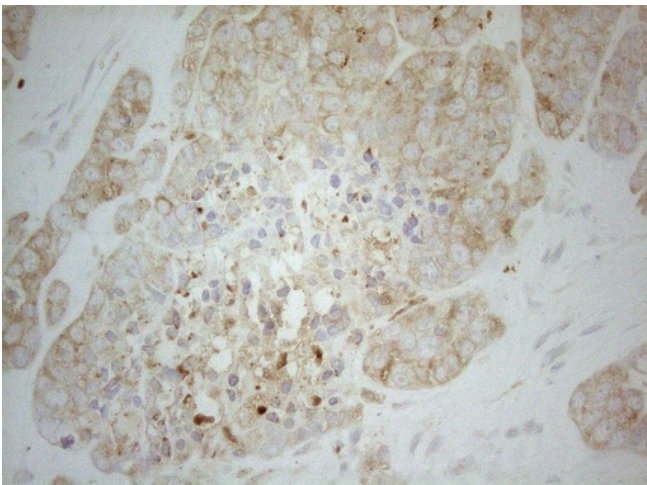
Arachidonic acid metabolism, Metabolic pathways

**Product images:**


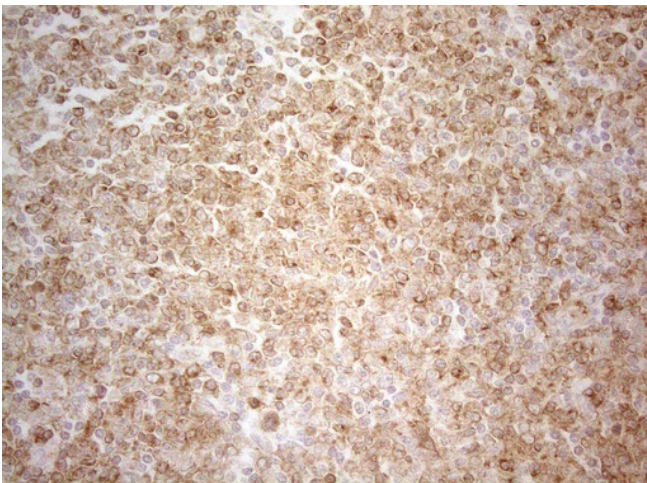
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY ALOX5 ([RC217259], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ALOX5 (1:2000). Positive lysates [LY400234] (100ug) and [LC400234] (20ug) can be purchased separately from OriGene.



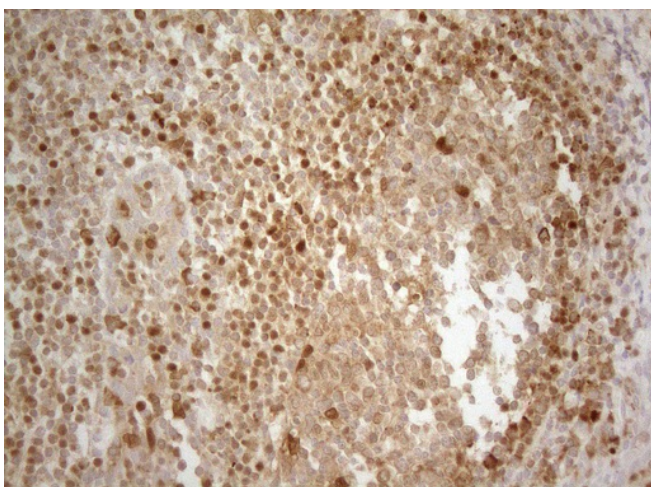
Immunohistochemical staining of paraffin-embedded Carcinoma of Human kidney tissue using anti-ALOX5 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human endometrium tissue using anti-ALOX5 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Human lymphoma tissue using anti-ALOX5 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Human tonsil within the normal limits using anti-ALOX5 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.