

#### OriGene Technologies, Inc.

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# **Product datasheet for TA807013**

## 5 Lipoxygenase (ALOX5) Mouse Monoclonal Antibody [Clone ID: OTI3F1]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI3F1
Applications: IHC, WB

Recommend Dilution: WB 1:2000, IHC 1:150

Reactivity: Human
Host: Mouse
Isotype: IgG2a

Clonality: Monoclonal

**Immunogen:** Human recombinant protein fragment corresponding to amino acids 18-364 of human

ALOX5(NP\_000689) produced in E.coli.

**Formulation:** PBS (PH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

Concentration: 1 mg/ml

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Predicted Protein Size: 77.8 kDa

**Gene Name:** arachidonate 5-lipoxygenase

Database Link: NP 000689 Entrez Gene 240 Human

**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 encoding different isoforms have been found for this

gene. [provided by RefSeq, Jan 2012]

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

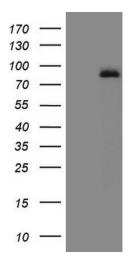




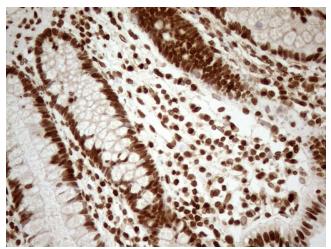
**Protein Families:** Druggable Genome

**Protein Pathways:** Arachidonic acid metabolism, Metabolic pathways

### **Product images:**

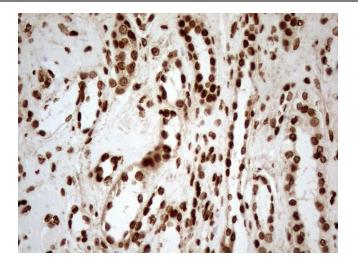


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY ALOX5 ([RC217259], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ALOX5 (1:2000). Positive lysates [LY400234] (100ug)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

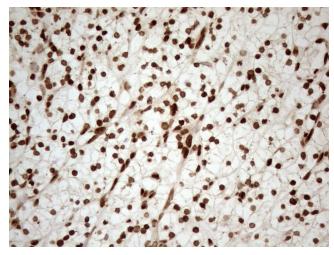


Immunohistochemical staining of paraffinembedded Human colon tissue using anti-ALOX5 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, TA807013) (1:150)

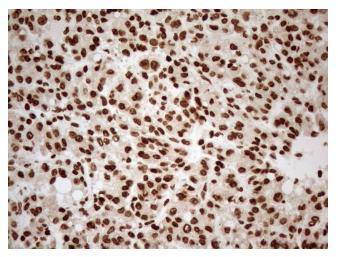




Immunohistochemical staining of paraffinembedded Human Kidney tissue using anti-ALOX5 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, TA807013) (1:150)

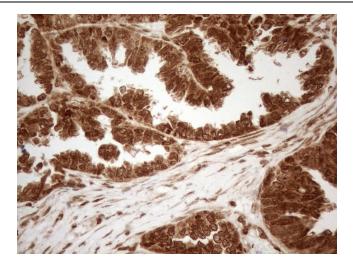


Immunohistochemical staining of paraffinembedded Carcinoma of Human kidney tissue using anti-ALOX5 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, TA807013) (1:150)

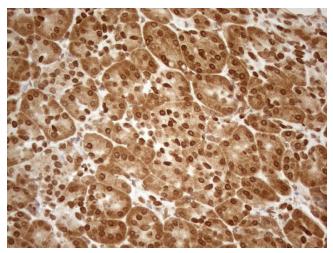


Immunohistochemical staining of paraffinembedded Human liver tissue using anti-ALOX5 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, TA807013) (1:150)

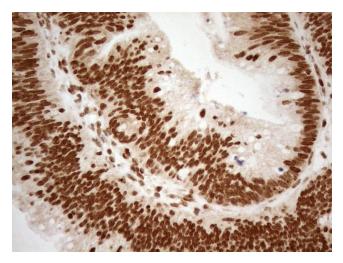




Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human ovary tissue using anti-ALOX5 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, TA807013) (1:150)

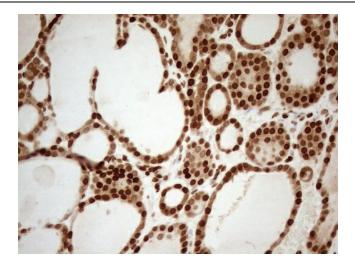


Immunohistochemical staining of paraffinembedded Human pancreas tissue using anti-ALOX5 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, TA807013) (1:150)

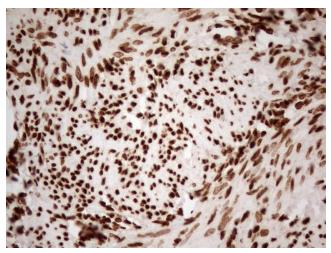


Immunohistochemical staining of paraffinembedded Carcinoma of Human pancreas tissue using anti-ALOX5 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, TA807013) (1:150)

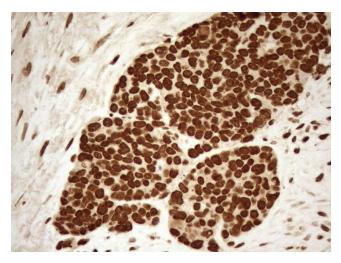




Immunohistochemical staining of paraffinembedded Human thyroid tissue using anti-ALOX5 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, TA807013) (1:150)

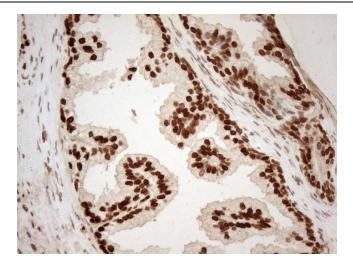


Immunohistochemical staining of paraffinembedded Human endometrium tissue using anti-ALOX5 mouse monoclonal antibody. (Heatinduced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, TA807013) (1:150)

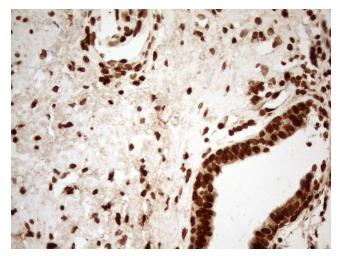


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human endometrium tissue using anti-ALOX5 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, TA807013) (1:150)





Immunohistochemical staining of paraffinembedded Human prostate tissue using anti-ALOX5 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, TA807013) (1:150)



Immunohistochemical staining of paraffinembedded Carcinoma of Human prostate tissue using anti-ALOX5 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, TA807013) (1:150)