

Goat Anti-GOT2 (aa 295 to 306) Antibody Peptide-affinity purified goat antibody Catalog # AF1490a

# **Specification**

# Goat Anti-GOT2 (aa 295 to 306) Antibody - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, E <u>P00505</u> <u>NP\_002071</u>, <u>2806</u>, <u>14719 (mouse)</u>, <u>25721 (rat)</u> Human Mouse, Rat Goat Polyclonal 100ug/200ul IgG 47518

# Goat Anti-GOT2 (aa 295 to 306) Antibody - Additional Information

Gene ID 2806

### **Other Names**

Aspartate aminotransferase, mitochondrial, mAspAT, 2.6.1.1, 2.6.1.7, Fatty acid-binding protein, FABP-1, Glutamate oxaloacetate transaminase 2, Kynurenine aminotransferase 4, Kynurenine aminotransferase IV, Kynurenine--oxoglutarate transaminase 4, Kynurenine--oxoglutarate transaminase 1V, Plasma membrane-associated fatty acid-binding protein, FABPpm, Transaminase A, GOT2

Dilution WB~~1:1000 E~~N/A

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

Goat Anti-GOT2 (aa 295 to 306) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# Goat Anti-GOT2 (aa 295 to 306) Antibody - Protein Information

Name GOT2 (<u>HGNC:4433</u>)



### **Function**

Catalyzes the irreversible transamination of the L-tryptophan metabolite L-kynurenine to form kynurenic acid (KA). As a member of the malate-aspartate shuttle, it has a key role in the intracellular NAD(H) redox balance. Is important for metabolite exchange between mitochondria and cytosol, and for amino acid metabolism. Facilitates cellular uptake of long-chain free fatty acids.

### **Cellular Location**

Mitochondrion matrix. Cell membrane. Note=Exposure to alcohol promotes translocation to the cell membrane.

# Goat Anti-GOT2 (aa 295 to 306) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# Goat Anti-GOT2 (aa 295 to 306) Antibody - Images



AF1490a (0.03  $\mu$ g/ml) staining of Human Kidney lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

# Goat Anti-GOT2 (aa 295 to 306) Antibody - Background

Glutamic-oxaloacetic transaminase is a pyridoxal phosphate-dependent enzyme which exists in cytoplasmic and inner-membrane mitochondrial forms, GOT1 and GOT2, respectively. GOT plays a role in amino acid metabolism and the urea and tricarboxylic acid cycles. The two enzymes are homodimeric and show close homology.

# Goat Anti-GOT2 (aa 295 to 306) Antibody - References

Sequential use of transcriptional profiling, expression quantitative trait mapping, and gene association implicates MMP20 in human kidney aging. Wheeler HE, et al. PLoS Genet, 2009 Oct. PMID 19834535.



Common variants at ten loci influence QT interval duration in the QTGEN Study. Newton-Cheh C, et al. Nat Genet, 2009 Apr. PMID 19305408.

Phospholipid transfer protein activity is determined by type 2 diabetes mellitus and metabolic syndrome, and is positively associated with serum transaminases. Dullaart RP, et al. Clin Endocrinol (Oxf), 2008 Mar. PMID 17877759.

Association study of GOT2 genetic polymorphisms and schizophrenia. Tsai SJ, et al. Psychiatr Genet, 2007 Oct. PMID 17728674.

Mitochondrial aspartate aminotransferase: a third kynurenate-producing enzyme in the mammalian brain. Guidetti P, et al. J Neurochem, 2007 Jul. PMID 17442055.