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**Product Name: KD-Validated Glutamic-Oxaloacetic Transaminase 2 Recombinant Rabbit Monoclonal Antibody****Catalog #: KVA01021**

For research use only.

**Summary**

|                     |                                                                             |
|---------------------|-----------------------------------------------------------------------------|
| <b>Description</b>  | KO&KD-Validated antibody                                                    |
| <b>Host</b>         | Rabbit                                                                      |
| <b>Application</b>  | WB,FCM,ICC,IHC-P                                                            |
| <b>Reactivity</b>   | Human,Mouse,Rat                                                             |
| <b>Conjugation</b>  | Unconjugated                                                                |
| <b>Modification</b> | Unmodified                                                                  |
| <b>Isotype</b>      | Rabbit IgG                                                                  |
| <b>Clonality</b>    | Rabbit mAb                                                                  |
| <b>Form</b>         | Liquid                                                                      |
| <b>Storage</b>      | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles. |
| <b>Shipping</b>     | Ice bags                                                                    |
| <b>Buffer</b>       | Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.   |
| <b>Purification</b> | Affinity purification                                                       |

**Application**

|                         |                                                                            |
|-------------------------|----------------------------------------------------------------------------|
| <b>Dilution Ratio</b>   | WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200 |
| <b>Molecular Weight</b> | Calculated MW: 47.5kDa                                                     |

**Antigen Information**

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>         | GOT2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Alternative Names</b> | GOT2; Glutamic-Oxaloacetic Transaminase 2; KYAT4; Kynurenine Aminotransferase IV; MAspAT; KATIV; KAT4; Plasma Membrane-Associated Fatty Acid-Binding Protein; Glutamic-Oxaloacetic Transaminase 2, Mitochondrial; Aspartate Aminotransferase, Mitochondrial; Kynurenine--Oxoglutarate Transaminase IV; Kynurenine--Oxoglutarate Transaminase 4; Glutamate Oxaloacetate Transaminase 2; Kynurenine Aminotransferase 4; Aspartate Aminotransferase 2; Fatty Acid-Binding Protein; Aspartate Transaminase 2; Transaminase A; EC 2.6.1.1; MitAAT; FABP-1; FABPpm; Glutamic-Oxaloacetic Transaminase 2, Mitochondrial (Aspartate Aminotransferase 2); EC 2.6.1.7; EC 2.6.1; MITAAT; DEE82 |
| <b>Gene ID</b>           | 2806.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

**SwissProt ID** P00505  
**Immunogen** A synthesized peptide derived from human GOT2

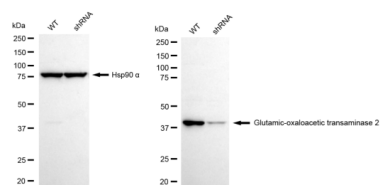
## Background

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. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2013]

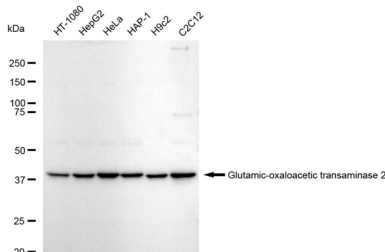
## Research Area

Signal Transduction,Cancer,Metabolism

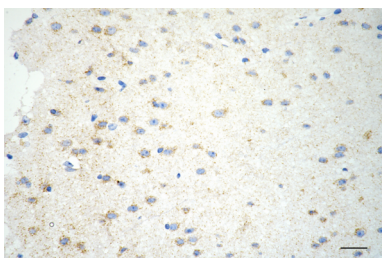
## Image Data



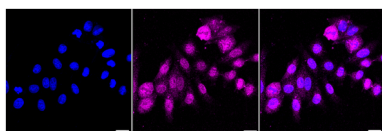
Western blotting analysis using Glutamic-oxaloacetic transaminase 2 antibody (KVA01021). Glutamic-oxaloacetic transaminase 2 expression in wild type (WT) and Glutamic-oxaloacetic transaminase 2 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with Glutamic-oxaloacetic transaminase 2 antibody (KVA01021, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



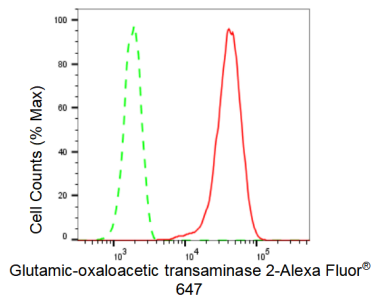
Western blotting analysis using Glutamic-oxaloacetic transaminase 2 antibody (KVA01021). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Glutamic-oxaloacetic transaminase 2 antibody (KVA01021, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunohistochemistry was performed on paraffin-embedded mouse brain using glutamic-oxaloacetic transaminase 2 antibody (KVA01021, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunocytochemical staining of HepG2 cells with Glutamic-oxaloacetic transaminase 2 antibody (KVA01021, 1:1,000). Nuclei were stained blue with DAPI; Glutamic-oxaloacetic transaminase 2 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser intensity and smart gain: Medium. Scale bar, 20 µm.



Flow cytometric analysis of Glutamic-oxaloacetic transaminase 2 expression in HepG2 cells using Glutamic-oxaloacetic transaminase 2 antibody (KVA01021, 1:2,000). Green, isotype control; red, Glutamic-oxaloacetic transaminase 2.