

Store at
-20C
#34423**GOT1 (E4A4O) Rabbit mAb**

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R Mk	Endogenous	41	Rabbit IgG	#P17174	2805

Product Usage Information**Application**

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

GOT1 (E4A4O) Rabbit mAb recognizes endogenous levels of total GOT1 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ala344 of human GOT1 protein.

Background

Glutamate oxaloacetate transaminase 1 (GOT1) catalyzes the interconversion of aspartate and oxaloacetate (1). The increased transamination primarily catalyzed by GOT1 leads to elevated levels of 2-hydroxyglutarate, which promotes methylation of the *Foxp3* gene locus, inhibits Foxp3 expression and activates T helper 17 (T_H17) cell differentiation (2). In addition, GOT1 is critical to the survival of cells with electron transport chain inhibition by generating aspartate, a metabolite determining the proliferation of these cells (3-4). Studies also show that GOT1 plays a key role in the noncanonical glutamine pathway that supports liver tumorigenesis (5).

Background References

1. Zhou, X. et al. (2018) *BMC Cancer* 18, 559.
2. Xu, T. et al. (2017) *Nature* 548, 228-233.
3. Birsoy, K. et al. (2015) *Cell* 162, 540-51.
4. Van Vranken, J.G. and Rutter, J. (2015) *Cell* 162, 471-3.
5. Xu, P. et al. (2016) *Genes Dev* 30, 1255-60.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Mk:** Monkey

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