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KMO Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8660C

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	O15229
Reactivity	Human, Rat, Mouse
Predicted	Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	55810
Antigen Region	155-182

Additional Information

Gene ID	8564
Other Names	Kynurenine 3-monooxygenase {ECO:0000255|HAMAP-Rule:MF_03018}, 114139 {ECO:0000255|HAMAP-Rule:MF_03018}, Kynurenine 3-hydroxylase {ECO:0000255|HAMAP-Rule:MF_03018}, KMO
Target/Specificity	This KMO antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 155-182 amino acids from the Central region of human KMO.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	KMO Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KMO {ECO:0000255|HAMAP-Rule:MF_03018, ECO:0000312|HGNC:HGNC:6381}
Function	Catalyzes the hydroxylation of L-kynurenine (L-Kyn) to form

	3-hydroxy-L-kynurenine (L-3OHKyn) (PubMed:23575632, PubMed:26752518, PubMed:28604669, PubMed:29208702, PubMed:29429898). Required for synthesis of quinolinic acid, a neurotoxic NMDA receptor antagonist and potential endogenous inhibitor of NMDA receptor signaling in axonal targeting, synaptogenesis and apoptosis during brain development. Quinolinic acid may also affect NMDA receptor signaling in pancreatic beta cells, osteoblasts, myocardial cells, and the gastrointestinal tract (Probable).
Cellular Location	Mitochondrion outer membrane {ECO:0000255|HAMAP- Rule:MF_03018, ECO:0000269|PubMed:9237672}; Multi-pass membrane protein {ECO:0000255|HAMAP-Rule:MF_03018, ECO:0000269|PubMed:9237672}
Tissue Location	Highest levels in placenta and liver. Detectable in kidney.

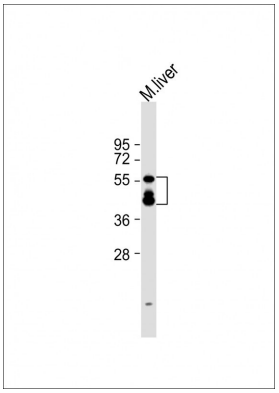
Background

Kynurenine 3-monooxygenase (KMO; EC 1.14.13.9) is an NADPH-dependent flavin monooxygenase that catalyzes the hydroxylation of the L-tryptophan metabolite L-kynurenine to form L-3-hydroxykynurenine.

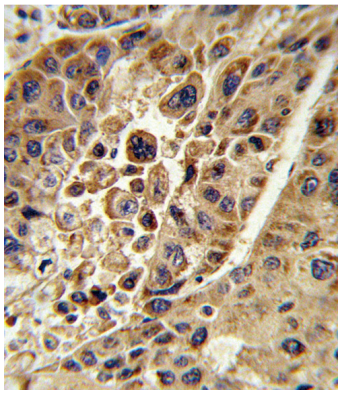
References

Ligam,P., et.al., Placenta 26 (6), 498-504 (2005)

Images

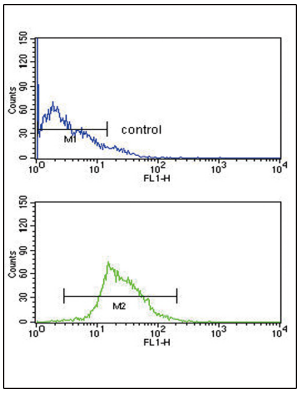


Anti-KMO Antibody (Center) at 1:2000 dilution + mouse liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 56 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with KMO Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

KMO Antibody (Center) (Cat. #AP8660c) flow cytometry analysis of CEM cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.