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KMO Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP8660C

Specification

KMO Antibody (Center) - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	O15229
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**155-182**

KMO Antibody (Center) - 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~~1:2000
IHC-P~~1:10~50
FC~~1:10~50

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.

KMO Antibody (Center) - 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}

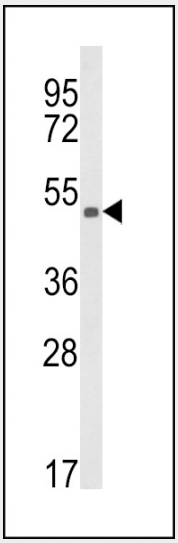
Tissue Location
Highest levels in placenta and liver. Detectable in kidney.

KMO Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KMO Antibody (Center) - Images



Western blot analysis of KMO Antibody (Center) (Cat. #AP8660c) in CEM cell line lysates (35ug/lane). KMO (arrow) was detected using the purified Pab.

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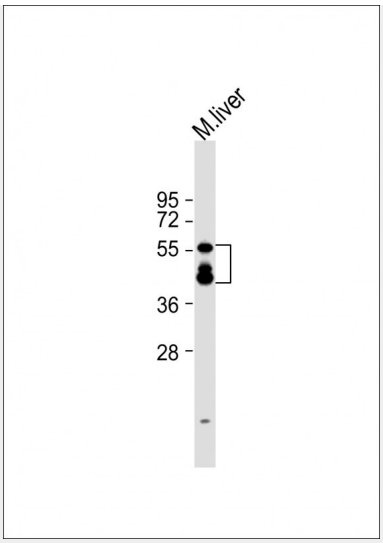
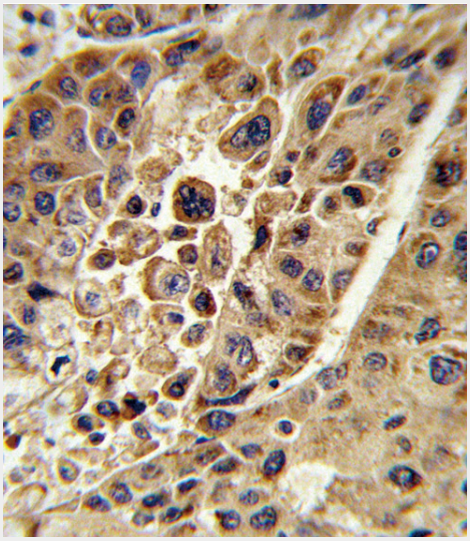


Anti-KMO Antibody (Center) at 1:2000 dilution + mouse liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 56 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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.

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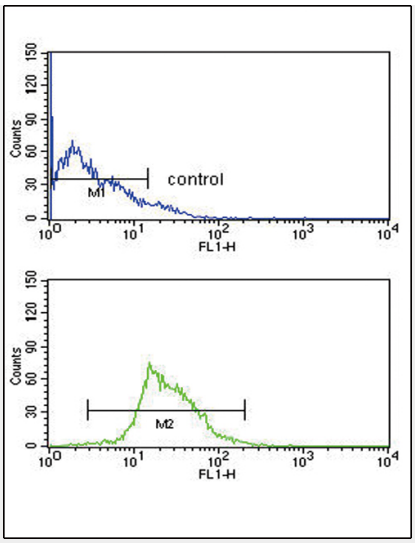

KMO Antibody (Center) (Cat. #AP8660c) flow cytometry analysis of CEM cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

KMO Antibody (Center) - 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.

KMO Antibody (Center) - References

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