

**Anti-KMO (RABBIT) Antibody**  
**Kmo Antibody**  
**Catalog # ASR5679****Specification**

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**Anti-KMO (RABBIT) Antibody - Product Information**

Host	Rabbit
Conjugate	Unconjugated
Target Species	Mouse
Reactivity	Mouse
Clonality	Polyclonal
Application	WB, IHC, E, I, LCI
Application Note	Anti-KMO antibody is tested for ELISA and Western Blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~58 kDa corresponding to the appropriate cell lysate or extract.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	KMO affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region surrounding 200-300aa of the mouse KMO chain.
Stabilizer	50% (v/v) Glycerol

**Anti-KMO (RABBIT) Antibody - Additional Information****Gene ID** 8564**Other Names**  
8564**Purity**

Anti-KMO was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody is specific towards Kynurenine 3-monooxygenase (KMO). A BLAST analysis was used to suggest cross-reactivity with Mouse based on 100% sequence homology. Cross-reactivity with KMO from other sources has not been determined.

**Storage Condition**

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

**Precautions Note**

This product is for research use only and is not intended for therapeutic or diagnostic applications.

## Anti-KMO (RABBIT) Antibody - 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:<a href="http://www.uniprot.org/citations/23575632" target="\_blank">23575632</a>, PubMed:<a href="http://www.uniprot.org/citations/26752518" target="\_blank">26752518</a>, PubMed:<a href="http://www.uniprot.org/citations/28604669" target="\_blank">28604669</a>, PubMed:<a href="http://www.uniprot.org/citations/29208702" target="\_blank">29208702</a>, PubMed:<a href="http://www.uniprot.org/citations/29429898" target="\_blank">29429898</a>). 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

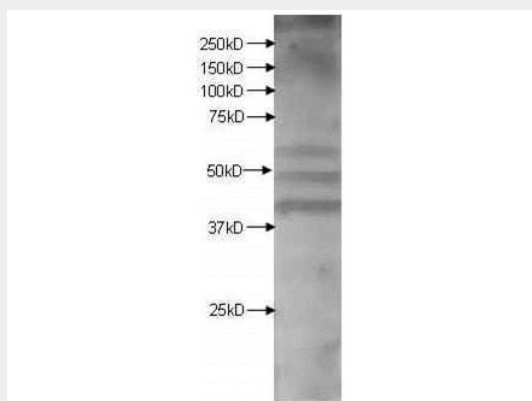
Highest levels in placenta and liver. Detectable in kidney.

## Anti-KMO (RABBIT) Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-KMO (RABBIT) Antibody - Images



Western Blot of Rabbit anti-KMO antibody. Lane 1: Brain Extract. Load: 10 µg per lane. Primary antibody: KMO antibody at 1 µg/mL for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 58 kDa for KMO. Other band(s): Other bands at lower molecular weights. These bands are all specifically blocked by KMO peptide.

#### **Anti-KMO (RABBIT) Antibody - Background**

Kynurenine 3-monooxygenase (KMO) catalyzes the hydroxylation of L-kynurenine (L-Kyn) to form 3-hydroxy-L-kynurenine (L-3OHKyn). The enzyme is required for synthesis of quinolinic acid. Quinolinic acid is a neurotoxic NMDA receptor antagonist and potential endogenous inhibitor of NMDA receptor signaling in axonal targeting, synaptogenesis and apoptosis during brain development. Anti-KMO antibodies are ideal for researchers interested in Apoptosis, Neurodegeneration, and Neuroscience research.