# Recombinant KMO protein (His tag)

| | |
|---|---|
| **Catalog Number** | 534056 |
| **Synonyms** | Kynurenine 3-hydroxylase; Protein cinnabar |
| **Species** | Drosophila melanogaster |
| **Expression System** | E. coli |
| **Accession** | A1Z746 |
| **Gene ID** | 35724 |
| **Molecular Weight** | Predictes a molecular mass of 47.50 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 48 kDa band. |

## Product Information

| | |
|---|---|
| **Sequence Region** | 1-404 |
| **Form** | Lyophilized powder |
| **Formulation** | Lyophilized from sterile PBS, pH 7.4 |
| **Purity** | >89%, by SDS-PAGE with Coomassie Brilliant Blue staining. |
| **Endotoxin** | Not tested. |
| **Activity** | Not tested. |
| **Stability** | Samples are stable for up to twelve months from date of receipt at -70℃ |
| **Protein Construction** | DNA encoding 1-404 aa (A1Z746) were fused with 6His tag. |

## Storage & Handling

| | |
|---|---|
| **Reconstitution** | Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. |
| **Storage** | Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. |
| **Shipping** | In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature.<br>Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise. |

## Description

| | |
|---|---|
| **Description** | Recombinant Drosophila melanogaster Kynurenine 3-monooxygenase (Kynurenine 3-hydroxylase) fragment (residues 1-404), a stable and soluble unit ideal for structural and biochemical studies of this key enzyme in the kynurenine pathway.<br>Kynurenine 3-monooxygenase (EC 1.14.13.9), also known as Protein cinnabar, catalyzes the hydroxylation of L-kynurenine to form 3-hydroxy-L-kynurenine, a critical step in the synthesis of quinolinic acid. This mitochondrial multi-pass membrane protein plays an essential role in tryptophan metabolism and neuroactive compound production. The recombinant fragment (1-404) represents a computationally optimized stable domain suitable for investigating enzymatic mechanisms and structural characteristics. |