Recombinant AOFA protein (His tag)

Catalog Number	539840
Synonyms	Monoamine oxidase type A; MAO-A
Species	Human
Expression System	E. coli
Accession	P21397
Molecular Weight	Predictes a molecular mass of 58.09 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 59 kDa band.

Product Information

Sequence Region	1-497
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 1-497 aa (P21397) 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. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	This product is a recombinant fragment of human Amine oxidase [flavin-containing] A (MAO-A), comprising amino acids 1-497. It represents a stable and soluble unit of this key neurotransmitter-metabolizing enzyme, optimized for structural and biochemical research applications. Human MAO-A (EC 1.4.3.21/1.4.3.4) catalyzes the oxidative deamination of primary and secondary amines, including neurotransmitters such as serotonin, with concomitant reduction of oxygen to hydrogen peroxide. This enzyme plays crucial roles in the metabolism of neuroactive and vasoactive amines in both the central nervous system and peripheral tissues. MAO-A preferentially oxidizes serotonin and also catalyzes the oxidative deamination of kynuramine. The full-length protein is localized to the outer mitochondrial membrane as a single-pass type IV membrane protein with its catalytic domain facing the cytoplasmic side, where it performs essential functions in amine metabolism and neurotransmitter regulation.