Recombinant Homo sapiens Protein-methionine sulfoxide oxidase MICAL2

Catalog No: #AP72668

Package Size: #AP72668-1 20ug #AP72668-2 100ug #AP72668-3 1mg

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Description

Product Name	Recombinant Homo sapiens Protein-methionine sulfoxide oxidase MICAL2
Brief Description	Recombinant Protein
Host Species	Yeast
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:1-495aaSequence Info:Partial
Other Names	Molecule interacting with CasL protein 2 ;MICAL-2
Accession No.	O94851
Uniprot	O94851
GeneID	9645;
Calculated MW	58.5 kDa
Tag Info	N-terminal 6xHis-tagged
Target Sequence	MGENEDEKQAQAGQVFENFVQASTCKGTLQAFNILTRHLDLDPLDHRNFYSKLKSKVTTWKAKALWYKLDKR GSHKEYKRGKSCTNTKCLIVGGGPCGLRTAIELAYLGAKVVVVEKRDSFSRNNVLHLWPFTIHDLRGLGAKKF YGKFCAGSIDHISIRQLQLILFKVALMLGVEIHVNVEFVKVLEPPEDQENQKIGWRAEFLPTDHSLSEFEFDVIIG ADGRRNTLEGFRRKEFRGKLAIAITANFINRNSTAEAKVEEISGVAFIFNQKFFQDLKEETGIDLENIVYYKDCTH YFVMTAKKQSLLDKGVIINDYIDTEMLLCAENVNQDNLLSYAREAADFATNYQLPSLDFAMNHYGQPDVAMFD FTCMYASENAALVRERQAHQLLVALVGDSLLEPFWPMGTGCARGFLAAFDTAWMVKSWNQGTPPLELLAER ESLYRLLPQTTPENINKNFEQYTLDPGTRYPNLNSHCVRPHQVKHLYITKELEH
Formulation	Tris-based buffer50% glycerol
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Background

Nuclear monooxygenase that promotes depolymerization of F-actin by mediating oxidation of specific methionine residues on actin and regulates the SRF signaling. Acts by modifying nuclear actin subunits through the addition of oxygen to form methionine-sulfoxide, leading to promote actin filament severing and prevent repolymerization. Acts as a key regulator of the SRF signaling pathway elicited by nerve growth factor and serum: mediates oxidation and subsequent depolymerization of nuclear actin, leading to increase MKL1,MRTF-A presence in the nucleus and promote SRF:MKL1,MRTF-A-dependent gene transcription. Does not activate SRF:MKL1,MRTF-A through RhoA.

References

Complete sequencing and characterization of 21,243 full-length human cDNAs.Ota T., Suzuki Y., Nishikawa T., Otsuki T., Sugiyama T., Irie R., Wakamatsu A., Hayashi K., Sato H., Nagai K., Kimura K., Makita H., Sekine M., Obayashi M., Nishi T., Shibahara T., Tanaka T., Ishii S. , Yamamoto

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Note: This product is for in vitro research use only