



Recombinant Human Protein-methionine sulfoxide oxidase MICAL2 (MICAL2), partial

Product Code	CSB-YP013808HU
Relevance	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.
Abbreviation	Recombinant Human MICAL2 protein, partial
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.
Uniprot No.	O94851
Alias	Molecule interacting with CasL protein 2 ;MICAL-2
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	≥ 90% as determined by SDS-PAGE.
Sequence	MGENEDEKQAQAGQVFENFVQASTCKGTLQAFNILTRHLDLPLDHRNFYSK LKSKVTTWKAKALWYKLDKRGSHKEYKRGKSCNTKCLIVGGGPCGLRTAIEL AYLGAKVVVEKRDSFSRNNVLHLWPFTIHDLRGLGAKKFYKFCAGSIDHISI RQLQLILFKVALMLGVEIHVNVEFVKVLEPPEDQENQKIGWRAEFLPTDHSLS FEFDVIIGADGRRNTLEGFRRKEFRGKLAIAITANFINRNSTAEAKVEEISGVAFI FNQKFFQDLKEETGIDLENIVYYKDCTHYFVMTAKKQSLLDKGVINDYIDTEML LCAENVNQDNLLSYAREAADFATNYQLPSLDFAMNHYGQPDVAMFDFTCMYA SENAALVRERQAHQLLVALVGDSLLEPFWPMGTGCARGFLAAFDTAWMVKS WNQGTPPLELLAERESLYRLLPQTTPENINKNFQYTLDPGTRYPNLNSHCVR PHQVKHLYITKELEH
Research Area	Cell Biology
Source	Yeast
Target Names	MICAL2
Protein Names	Recommended name: Protein-methionine sulfoxide oxidase MICAL2 EC= 1.14.13.- Alternative name(s): Molecule interacting with CasL protein 2 Short name= MICAL-2
Expression Region	1-495aa



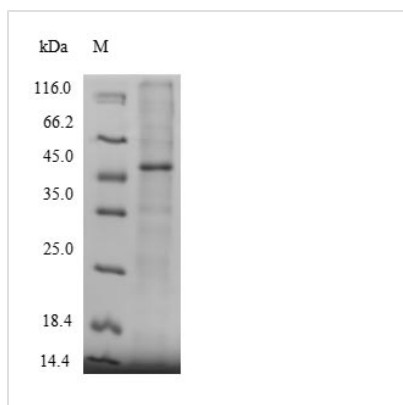
Notes Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Tag Info N-terminal 6xHis-tagged

Mol. Weight 58.5kDa

Protein Length Partial

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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.