abcam

Product datasheet

Recombinant Human Cysteine Dioxygenase CDO1 protein ab153778

Description

Product name	Recombinant Human Cysteine Dioxygenase CDO1 protein
Purity	> 95 % SDS-PAGE. ab153778 is greater than 95% pure, as determined by SEC-HPLC and reducing SDS-PAGE. It is lyophilized from an 0.2 µM filtered solution.
Endotoxin level	< 1.000 Eu/µg
Expression system	Escherichia coli
Accession	Q16878
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MEQTEVLKPRTLADLIRILHQLFAGDEVNVEEVQAIMEAYE SDPTEWAMY AKFDQYRYTRNLVDQGNGKFNLMILCWGEGHGSSIHDHTN SHCFLKMLQG NLKETLFAWPDKKSNEMVKKSERVLRENQCAYINDSIGLH RVENISHTEP AVSLHLYSPPFDTCHAFDQRTGHKNKVTMTFHSKFGIRTP NATSGSLENN
Predicted molecular weight	23 kDa
Amino acids	1 to 200
Tags	His tag N-Terminus

Specifications

Our Abpromise guarantee covers the use of **ab153778** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE HPLC
Form	Liquid

Additional notes	Previously labelled as Cysteine Dioxygenase Type 1.

Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80ºC. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.32% Tris HCl, 10% Glycerol (glycerin, glycerine), 0.88% Sodium chloride

General Info

Function	Initiates several important metabolic pathways related to pyruvate and several sulfurate compounds including sulfate, hypotaurine and taurine. Critical regulator of cellular cysteine concentrations. Has an important role in maintaining the hepatic concentation of intracellular free cysteine within a proper narrow range.
Tissue specificity	Highly expressed in liver and placenta. Low expression in heart, brain and pancreas. Also detected in hepatoblastoma HepG2 cells.
Pathway	Organosulfur biosynthesis; taurine biosynthesis; hypotaurine from L-cysteine: step 1/2.
Sequence similarities	Belongs to the cysteine dioxygenase family.
Post-translational modifications	The thioether cross-link between Cys-93 and Tyr-157 plays a structural role through stabilizing the Fe(2+) ion, and prevents the production of highly damaging free hydroxyl radicals by holding the oxygen radical via hydroxyl hydrogen.

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors