Recombinant Carbonyl reductase [NADPH] 1

Catalog No: #AP72476

Package Size: #AP72476-1 20ug #AP72476-2 100ug #AP72476-3 1mg

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

Product Name	Recombinant Carbonyl reductase [NADPH] 1
Brief Description	Recombinant Protein
Host Species	Yeast
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:2-277aaSequence Info:Full Length
Other Names	15-hydroxyprostaglandin dehydrogenase [NADP(+)] (EC:1.1.1.197)NADPH-dependent carbonyl reductase 1;Prostaglandin 9-ketoreductaseProstaglandin-E(2) 9-reductase (EC:1.1.1.189)Short chain dehydrogenase,reductase family 21C member 1
Accession No.	P16152
Uniprot	P16152
GeneID	873;
Calculated MW	32.2 kDa
Tag Info	N-terminal 6xHis-tagged
Target Sequence	SSGIHVALVTGGNKGIGLAIVRDLCRLFSGDVVLTARDVTRGQAAVQQLQAEGLSPRFHQLDIDDLQSIRALRD FLRKEYGGLDVLVNNAGIAFKVADPTPFHIQAEVTMKTNFFGTRDVCTELLPLIKPQGRVVNVSSIMSVRALKS CSPELQQKFRSETITEEELVGLMNKFVEDTKKGVHQKEGWPSSAYGVTKIGVTVLSRIHARKLSEQRKGDKILL NACCPGWVRTDMAGPKATKSPEEGAETPVYLALLPPDAEGPHGQFVSEKRVEQW
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

NADPH-dependent reductase with broad substrate specificity. Catalyzes the reduction of a wide variety of carbonyl compounds including quinones, prostaglandins, menadione, plus various xenobiotics. Catalyzes the reduction of the antitumor anthracyclines doxorubicin and daunorubicin to the cardiotoxic compounds doxorubicinol and daunorubicinol. Can convert prostaglandin E2 to prostaglandin F2-alpha. Can bind glutathione, which explains its higher affinity for glutathione-conjugated substrates. Catalyzes the reduction of S-nitrosoglutathione.

References

Human carbonyl reductase. Nucleotide sequence analysis of a cDNA and amino acid sequence of the encoded protein.Wermuth B., Bohren K.M., Heinemann G., von Wartburg J.-P., Gabbay K.H.J. Biol. Chem. 263:16185-16188(1988)Research Topic:Metabolism

Note: This product is for in vitro research use only