LD Biopharma, Inc.
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- PRODUCT DATA SHEET -

Name of Product: Recombinant Human PDCD10 Protein
Catalog Number: hRP-0889
Manufacturer: LD Biopharma, Inc.

Introduction

Human programmed cell death protein 10 (PDCD10) gene encodes an evolutionarily conserved protein associated with cell apoptosis. The protein interacts with the serine/threonine protein kinase MST4 to modulate the extracellular signal-regulated kinase (ERK) pathway. It also interacts with and is phosphoryated by serine/threonine kinase 25, and is thought to function in a signaling pathway essential for vascular development. Mutations in this gene are one cause of cerebral cavernous malformations, which are vascular malformations that cause seizures and cerebral hemorrhages.

Full-length mature human PDCD10 (212aa) gene was constructed with 17 aa N-terminal T7 tag This protein is expressed in E.coli as inclusion bodies. The final product was refolded using our unique "temperature shift inclusion body refolding" technology and chromatographically purified.

Gene Symbol:	PDCD10 (CCM3, TFAR15)
Accession Number:	NP_009148
Species:	Human
Size:	50 µg / Vial
Composition:	0.4 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, arginine, DTT and Glycerol.
Storage:	In Liquid. Keep at -80°C for long term storage. Product is stable at 4 °C for at least 30 days.

Key References

Fidalgo,M., et al., *Adaptor protein cerebral cavernous malformation 3 (CCM3) mediates phosphorylation of the cytoskeletal proteins ezrin/radixin/moesin by mammalian Ste20-4 to*

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protect cells from oxidative stress. J. Biol. Chem. 287 (14), 11556-11565 (2012)

Zhang,H., et al., *PDCD10 interacts with STK25 to accelerate cell apoptosis under oxidative stress*. Front. Biosci. 17, 2295-2305 (2012)

Lin,C., et al., *PDCD10/CCM3 acts downstream of {gamma}-protocadherins to regulate neuronal survival*. J. Biol. Chem. 285 (53), 41675-41685 (2010)

Applications

1. May be used for in vitro PDCD10 mediated oxidative stress regulation study with "ProFectin" based intracellular delivery of this protein.
2. As soluble /native protein, may be used as enzymatic substrate protein for kinase or ubiquitin assay development.
3. May be used for mapping PDCD10 protein-protein interaction.
4. As antigen for specific antibody production

Quality Control

Purity: > 90% by SDS-PAGE.

Recombinant Protein Sequence

MASMTGGQQMGRGEFGSMRMTMEEMKNEAETTSMVSMPLYAVMYPVFNELERVNLSAAQTLRAA
FIKAEKENPGLTQDIIMKILEKKSVEVNFTESLLRMAADDVEEYMIERPEPEFQDLNEKARALK
QILSKIPDEINDRVRFLQTIKDIASAIKELLDTVNNVFKKYQYQNRRALEHQKKEFVKYSKSFS
DTLKTYFKDGKAINVFVSANRLIHQTNLILQTFKTVA