Recombinant Human CRABP2 Protein (His Tag)

Catalog Number: PKSH031210

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

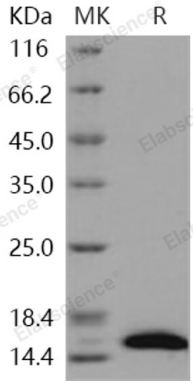
Description

Species	Human
Source	E.coli-derived Human CRABP2 protein Pro2-Glu 138, with an N-terminal His
Calculated MW	16.5 kDa
Observed MW	16.5 kDa
Accession	NP_001869.1
Bio-activity	Not validated for activity

Properties

Purity	> 96% as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 20 mM Tris, 500 mM NaCl, pH 8.0 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 96 % as determined by reducing SDS-PAGE.

Background

Cellular retinoic acid-binding protein 2, also known as Cellular retinoic acid-binding protein II, CRABP-II and CRABP2, is a protein which belongs to thecalycin superfamily and Fatty-acid binding protein (FABP) family. Cellular retinoic acid binding proteins (CRABP) are low molecular weight proteins whose precise function remains unknown. The predicted amino acid sequences of human CRABP1 and CRABP2 demonstrated a 99.3% and 93.5% identity to mouse CRABP1 and CRABP2, respectively. CRABP2 forms a beta-barrel structure that accommodates hydrophobic ligands in its interior. Expression of CRABP2, but not CRABP1 mRNA, was markedly increased (greater than 15-fold) by retinoic acid treatment of fibroblasts cultured from human skin, whereas no significant induction of CRABP2 mRNA was observed in human lung fibroblasts. CRABP2 transports retinoic acid to the nucleus. It regulates the access of retinoic acid to the nuclear retinoic acid receptors. CRABP2 is necessary for elastin induction by All-trans retinoic acid (ATRA) in MRC-5 cells. It is expressed at low levels in emphysema fibroblasts. This alteration in the retinoic acid signalling pathway in lung fibroblasts may contribute to the defect of alveolar repair in human pulmonary emphysema.

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