Recombinant Human CALML5/CLSP Protein (His &GST Tag)

Catalog Number: PKSH031003

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

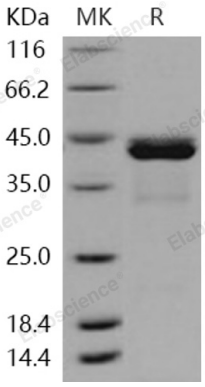
Description

Species	Human
Source	E.coli-derived Human CALML5/CLSP protein Met 1-Glu 146, with an N-terminal His & GST
Calculated MW	44.2 kDa
Observed MW	43 kDa
Accession	AAH39172.1
Bio-activity	Not validated for activity

Properties

Purity	> 92 % 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 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 20mM Tris, 150mM NaCl, 1mM DTT, 0.5mM GSH, 10% glycerol, pH 7.8 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



> 92 % as determined by reducing SDS-PAGE.

Background

Calmodulin-like protein 5, also known as Calmodulin-like skin protein, CALML5 and CLSP, is a protein which contains fourEF-hand domains. CALML5 / CLSP is particularly abundant in the epidermis where its expression is directly related to keratinocyte differentiation.The expression is very low in lung. CALML5 / CLSP binds calcium. It may be involved in terminal differentiation of keratinocytes. Coxsackievirus and adenovirus receptor (CAR) is a member of the immunoglobulin (Ig) superfamily and a component of epithelial tight junction. CAR functions as a primary receptor for coxsackievirus B and adenovirus (Ad) infection. CALML5 / CLSP is closely related to CAR. The structure and dynamics of human calmodulin-like skin protein CALML5 / CLSP have been characterized by NMR spectroscopy. The mobility of CALML5 / CLSP has been found to be different for the N-terminal and C-terminal domains. The N-terminal domain is characterized by four stable helices, which experience large fluctuations. This is shown to be due to mutations in the hydrophobic core. The overall N-terminal domain behavior is similar both in the full-length protein and in the isolated domain.