

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

Catalog No. PKSH031003

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

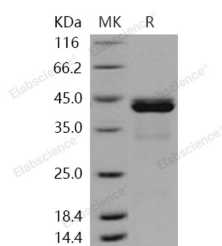
### Description

<b>Synonyms</b>	CLSP
<b>Species</b>	Human
<b>Expression Host</b>	E.coli
<b>Sequence</b>	Met 1-Glu 146
<b>Accession</b>	AAH39172.1
<b>Calculated Molecular Weight</b>	44.2 kDa
<b>Observed molecular weight</b>	43 kDa
<b>Tag</b>	N-His-GST
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 92 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	Please contact us for more information.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	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.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



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### Background

Calmodulin-like protein 5, also known as Calmodulin-like skin protein, CALML5 and CLSP, is a protein which contains

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four EF-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.