



Recombinant Protein Technical Manual
Recombinant Human CALML5/CLSP Protein (His &
GST Tag)
RPES0731

Product Data:

Product SKU: RPES0731

Size: 20µg

Species: Human

Expression host: E. coli

Uniprot: AAH39172.1

Protein Information:

Molecular Mass: 44.2 kDa

AP Molecular Mass: 43 kDa

Tag: N-His & GST

Bio-activity:

Purity: > 92 % as determined by reducing SDS-PAGE.

Endotoxin: Please contact us for more information.

Storage: 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 20mM Tris, 150mM NaCl, 1mM DTT, 0.5mM GSH, 10% glycerol, pH 7.8

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: CLSP

Immunogen Information:

Sequence: Met 1-Glu 146

Background:

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