

CAMLG, 1-189aa, Human, His tag, E.coli

Cat.NO.: TP01415

3th Edition

Synonyms: Calcium signal-modulating cyclophilin ligand, CAML

Description: The immunosuppressant drug cyclosporin A blocks a calcium-dependent signal from the T-cell receptor (TCR) that normally leads to T-cell activation. When bound to cyclophilin B, cyclosporin A binds and inactivates the key signaling intermediate calcineurin. CAMLG functions similarly to cyclosporin A, binding to cyclophilin B and acting downstream of the TCR and upstream of calcineurin by causing an influx of calcium. This integral membrane protein appears to be a new participant in the calcium signal transduction pathway, implicating cyclophilin B in calcium signaling, even in the absence of cyclosporin. Recombinant human CAMLG protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

Form: Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 10% glycerol

Molecular Weight: 23.2 kDa (212aa), confirmed by MALDI-TOF

Sequences:

MGSSHHHHHHSSGLVPRGSHMGSMESMAVATDGGERPAGSGLSASQRRRAELRRRKLLMNSEQRINRIMGF
HRPGSGAEEESQTKSKQQDSKLNLSVPSVSKRVVLGDSVSTGTDDQQGGVAEVKGTQLGDKLDSFIKPPECSS
DVNLELRQRNRGDLTADSVQRGSRHGLEQYLSRFEEAMKLRKQLISEKPSQEDGNTTEEFDSFR

Purity: > 95% by HPLC

Concentration: 0.5 mg/ml (determined by Bradford assay)

Endotoxin Level: <1.0 EU per 1 ug of protein (determined by LAL method)

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.