

## 32-13067: Calumenin Human

**Application :** Functional Assay

**Alternative Name :** CALU, Crocalbin, IEF SSP 9302, FLJ90608, Calumenin.

### Description

Source: Escherichia Coli.

Sterile Filtered clear solution.

Calumenin is a calcium-binding protein located in the endoplasmic reticulum (ER) and sarcoplasmic reticulum (SR) of mammalian tissues which plays a role in ER functions as protein folding and sorting. Calumenin belongs to a family of multiple EF-hand proteins (CERC) that include reticulocalbin, ERC-55, and Cab45 and the product of this gene. Calumenin binds 7 calcium ions having low affinity and takes part in such ER functions as protein folding and sorting.

Calumenin Human Recombinant produced in E. coli is a single polypeptide chain containing 297 amino acids (20-315) and having a molecular mass of 35kDa. Calumenin is purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 2 µg / 10 µg

**Purification :** Greater than 90.0% as determined by SDS-PAGE.

**Content :** The Calumenin solution (0.5mg/1ml) contains phosphate buffered saline (pH7.4) and 10% glycerol.

**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

**Amino Acid :** MKPTEKKDRV HHEPQLSDKV HNDQSFQDYD HDAFLGAEAA KTFDQLTPPE SKERLGKIVS  
KIDGDKDGFV TVDELKDWIK FAQRWIYED VERQWKGHDL NEDGLVSWEE YKNATYGYVL  
DDPDPDDGFN YKQMMVRDER RFKMADKGDG LIATKEEFTA FLHPPEYDYM KDIVVQETME  
DIDKNADGFI DLEFYIGDMY SHDGNTDEPE WVKTEREQFV EFRDKNRDGK MDKEETKDWI  
LPSPDYDHAEA EARHLVYESD QNKDGKLTKE EIVDKYDLFV GSQATDFGEA LVRHDEF.

### Application Note

The IC50 value is < 2.0nM. The inhibitory function of Cystatin 5 on protease activity of papain was measured by a fluorometric assay using Z-FR-AMC at pH 7.5 at 25C.