



# Recombinant Human Caldesmon (CALD1)

<b>Product Code</b>	CSB-MP004441HU
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	Q05682
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	MDDFERRREL RRQKREEMRL EAERIAQQRN DDDEEEAARE RRRRARQERL RQKQEEESLG QVTDQVEVNA QNSVPDEEAK TTTTNTQVEG DDEAAFLERL ARREERRQKR LQEALERQKE FDPTITDASL SLPSRRMQND TAENETTEKE EKSESRQERY EIEETETVTK SYQKNDWRDA EENKKEDKEK EEEEEKPKR GSIGENQVEV MVEEKTTESQ EETVVMLSKN GQISSEEPKQ EEEREQGSDE ISHHEKMEEE DKERAEAERA RLEAEERERI KAEQDKKIAD ERARIEAEEK AAAQERERRE AEERERMREE EKRAAEERQR IKEEEKRAAE ERQRIKEEEK RAAEERQRIK EEEKRAAEER QRARAEEMEE AKVEEQKRNK QLEEKHAMQ ETKIKGEKVE QKIEGKWVNE KKAQEDKLQT AVLKKQGEEK GTKVQAKREK LQEDKPTFKK EEIKDEKIKK DKEPKEEVKS FMDRKKGFTE VKSQNGEFMT HKLKHTENTF SRPGGRASVD TKEAEGAPQV EAGKRLEELR RRRGETESEE FEKLKQKQQE AALELEELKK KREERRKVLE EEEQRRKQEE ADRKLREEEE KRRLKEEIER RRAEAAEKRQ KMPEDGLSDD KKPFCFTPK GSSLKIEERA EFLNKSQKS SGVKSTHQA IVSKIDSRLE QY TSAIEGTK SAKPTKPAAS DLPVPAEGVR NIKSMWEKGN VFSSPTAAGT PNKETAGLKV GVSSRINEWL TKTPDGNKSP APKPSDLRPG DVSSKRNLWE KQSVDKVTSP TKV
<b>Source</b>	Mammalian cell
<b>Target Names</b>	CALD1
<b>Protein Names</b>	Recommended name: Caldesmon Short name= CDM
<b>Expression Region</b>	1-793
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full length protein
<b>Target Details</b>	This gene encodes a calmodulin- and actin-binding protein that plays an essential role in the regulation of smooth muscle and nonmuscle contraction. The conserved domain of this protein possesses the binding activities to Ca(2+)-calmodulin, actin, tropomyosin, myosin, and phospholipids. This protein is a potent inhibitor of the actin-tropomyosin activated myosin MgATPase, and serves as a mediating factor for Ca(2+)-dependent inhibition of smooth muscle contraction. Alternative splicing of this gene results in multiple transcript variants encoding distinct isoforms.
<b>Reconstitution</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the



contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

### Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.