

Calmodulin, human recombinant protein

CaM, CALM Phosphodiesterase 3':5'-cyclic nucleotide activator, CALM2, PHKD, CAMII, PHKD2, phosphoryl
Catalog # PBV11397r

Specification**Calmodulin, human recombinant protein - Product info**

Primary Accession [P62158](#)
Calculated MW **16.8 kDa KDa**

Calmodulin, human recombinant protein - Additional Info

Gene ID **801**
Gene Symbol **CALM1**

Other Names

CaM, CALM Phosphodiesterase 3':5'-cyclic nucleotide activator, CALM2, PHKD, CAMII, PHKD2, phosphorylase kinase delta.

Gene Source	Human
Source	E. coli
Assay&Purity	SDS-PAGE; ≥95%
Assay2&Purity2	N/A;
Recombinant	Yes
Sequence	MADQLTEEQIAEFKEAFSLFDKDGDTITTKEL GTVMRSLGQNPTEAELQDMINEVDADGNGTID FPEFLTMMARKMKDTSDEEEIREAFRVFDKDG NGYISAAELRHVMTNLGEKLTDEEVDEMIREAD IDGDGQVNYEEFVQMMTAK

Target/Specificity

Calmodulin

Application Notes

Reconstitute in water or an appropriate buffer (TBS, PBS, etc)

Format

Lyophilized

Storage

-20°C; Lyophilized from a salt free solution.

Calmodulin, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Calmodulin, human recombinant protein - Images**Calmodulin, human recombinant protein - Background**

Calmodulin (CaM) is a ubiquitous, calcium-binding protein that can bind to and regulate a multitude of different protein targets, thereby affecting many different cellular functions. CaM mediates processes such as inflammation, metabolism, apoptosis, muscle contraction, intracellular movement, short-term and long-term memory, nerve growth and the immune response. Calmodulin is expressed in many cell types and can have different subcellular locations, including the cytoplasm, within organelles, or associated with the plasma or organelle membranes. Many of the proteins that CaM binds are unable to bind calcium themselves, and as such use CaM as a calcium sensor and signal transducer. Calmodulin can also make use of the calcium stores in the endoplasmic reticulum, and the sarcoplasmic reticulum. CaM undergoes a conformational change upon binding to calcium, which enables it to bind to specific proteins for a specific response. CaM can bind up to four calcium ions, and can undergo post-translational modifications, such as phosphorylation, acetylation, methylation and proteolytic cleavage, each of which can potentially modulate its actions.

Calmodulin, human recombinant protein - References

Wawrzynczak E.J., et al. *Biochem. Int.* 9:177-185(1984).
Sengupta B., et al. *J. Biol. Chem.* 262:16663-16670(1987).
Fischer R., et al. *J. Biol. Chem.* 263:17055-17062(1988).
Koller M., et al. *Biochim. Biophys. Acta* 1087:180-189(1990).
Rhyner J.A., et al. *Eur. J. Biochem.* 225:71-82(1994).