Recombinant Human CALR / Calreticulin Protein (His tag)

Cat.NO.: TP07113

3th Edition

Synonyms:cC1qR;CRT;HEL-S-99n;RO;SSA

Description: Calreticulin is a multifunctional protein. It acts as a main Ca(2+)-binding (storage) protein in the lumen of the endoplasmic reticulum. Calreticulin binds Ca2+ ions (a second messenger in signal transduction), rendering it inactive. The Ca2+ is bound with low affinity, but high capacity, and can be released on a signal. Located in storage compartments associated with the endoplasmic reticulum, calreticulin also binds to misfolded proteins and prevents them from being exported from the endoplasmic reticulum to the golgi apparatus. The amino terminus of calreticulin interacts with the DNA-binding domain of the glucocorticoid receptor and prevents the receptor from binding to its specific glucocorticoid response element. Calreticulin reduces the binding of androgen receptor to its hormone-responsive DNA element and inhibits androgen receptor and retinoic acid receptor transcriptional activities in vivo, as well as retinoic acid-induced neuronal differentiation. Therefore, calreticulin acts as a significant modulator of the regulation of gene transcription by nuclear hormone receptors.

Form:PBS

Molecular Weight:47.4 kDa

Sequences: Met 1-Ala413

Purity:> 95% by HPLC

Concentration:

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.