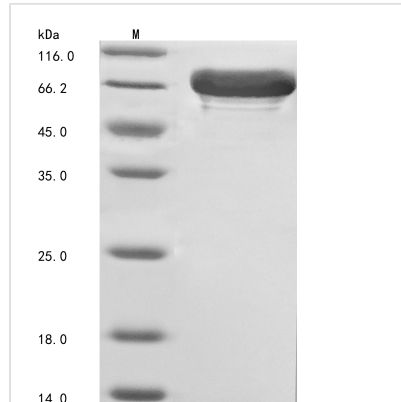




Recombinant Human Cryptochrome-1 (CRY1)

Product Code	CSB-EP621957HU
Abbreviation	Recombinant Human CRY1 protein
Storage	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.
Uniprot No.	Q16526
Storage Buffer	Tris-based buffer,50% glycerol
Product Type	Recombinant Proteins
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	MGVNAVHWFRKGLRLHDNPALKECIQGADTIRCVYILDPWFAGSSNVGINRW RFLQCLELDANLRKLNSRLFVIRGQPADVFPRLFKEWNITKLSIEYDSEPG KERDAAIKKLATEAGVEVIVRISHTLYDLDKIIELNQQPPLTYKRFQTLISKMEP LEIPVETITSEVIEKCTTPLSDDHDEKYGVPSLEELGFDTDGLSSAVWPGGETE ALTRLERHLERKAWVANFERPRMNANSLLASPTGLSPYLRFGLSCRLFYFKL TDLYKKVKKNSSPPLSLYGQLLWREFFYTAATNNPRFDKMEGNPICVQIPWDK NPEALAKWAEGRGTGFPWIDAIMTQLRQEGWIHHLARHAVACFLTRGDLWISW EEGMKVFEELLLDADWSINAGSWMWLSCSSFFQQFFHCYCPVGFGRRTPDN GDYIRRYLPVLRGFPKYIYDPWNAPEGIQKVAKCLIGVNYPKPMVNHAEASRL NIERMKQIYQQLSRYRGLGLLASVSPNPNGNGGFMGYSAENIPGCSSSGSCS QGSGILHYAHGDSQQTHLLKQGRSSMGTGLSGGKRPSQEEDTQSIGPKVQR QSTN
Research Area	Cardiovascular
Source	E.coli
Target Names	CRY1
Protein Names	Recommended name: Cryptochrome-1
Expression Region	1-586aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged and C-terminal Myc-tagged
Mol. Weight	73.8 kDa
Protein Length	Full Length
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The expression region of this recombinant Human CRY1 covers amino acids 1-586. The calculated molecular weight for this CRY1 protein is 73.8 kDa. This CRY1 recombinant protein is manufactured in e.coli. Fusion of the N-terminal 10xHis tag and C-terminal Myc tag into the CRY1 encoding gene fragment was conducted, allowing for easier detection and purification of the CRY1 protein in subsequent stages.

Human cryptochrome-1 (CRY1) is a core component of the circadian clock, regulating the rhythmic expression of genes involved in physiological processes. CRY1 functions as a transcriptional repressor, inhibiting CLOCK-BMAL1-mediated gene transcription. In chronobiology, CRY1 is crucial for maintaining circadian rhythms, impacting sleep-wake cycles and metabolic functions. Research on CRY1 extends to mental health, where circadian disruptions are linked to mood disorders. Additionally, CRY1's involvement in cancer and metabolic diseases highlights its relevance in oncology and metabolism research. Investigating CRY1 provides insights into circadian biology, offering potential applications in developing therapies for circadian-related disorders, mental health conditions, and metabolic diseases.

Shelf Life

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

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