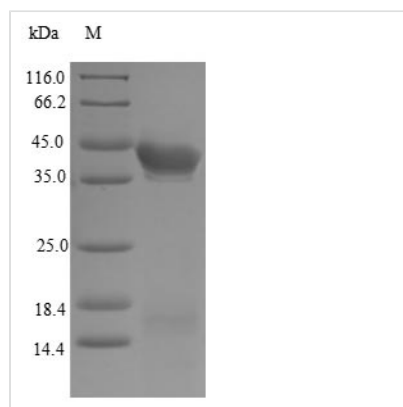




Recombinant Human Estrogen receptor beta (ESR2), partial

Product Code	CSB-EP007831HU1
Relevance	Nuclear hormone receptor. Binds estrogens with an affinity similar to that of ESR1, and activates expression of reporter genes containing estrogen response elements (ERE) in an estrogen-dependent manner (PubMed:20074560). Isoform beta-cx lacks ligand binding ability and has no or only very low ere binding activity resulting in the loss of ligand-dependent transactivation ability. DNA-binding by ESR1 and ESR2 is rapidly lost at 37 degrees Celsius in the absence of ligand while in the presence of 17 beta-estradiol and 4-hydroxy-tamoxifen loss in DNA-binding at elevated temperature is more gradual.
Abbreviation	Recombinant Human ESR2 protein, partial
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.	Q92731
Alias	Short name: ER-beta Alternative name(s): Nuclear receptor subfamily 3 group A member 2
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	?85% as determined by SDS-PAGE.
Sequence	DIKNSPSSLNSPSSYNCSQSILPLEHGSIYIPSSYVDSHHEY PAMTFYSPAVMN YSIPSNVTNLEGGPGRQTTPNVLWPTPGHLSPLVVHRQLSHLYAEPQKSPW CEARSLEHTLPVNRETLKRKVSIGNRCASPTGPGSKRDAHFCVCS DYASGY HYGVWSCEGCKAFFKR SIQGHNDYICPATNQCTIDKNRRKSCQACRLRKCYE VGMVKCGSRRERCGYRLVRRQRSADQLHCAGKAKRSGGHAPRVRELLLD A LSPEQLVLTLLAEPPHVLISRPSAPFTEASMMMSLT KLADKELVHMISWAKKIP GMRGNA
Source	E.coli
Target Names	ESR2
Expression Region	2-323AA of Isoform 3
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	39.8kDa
Protein Length	Partial of Isoform 3
Image	



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

Description

The expression region of this recombinant Human ESR2 covers amino acids 2-323. This ESR2 protein is expected to have a theoretical molecular weight of 39.8 kDa. This protein is generated in a e.coli-based system. The ESR2 gene fragment has been modified by fusing the N-terminal 6xHis tag, providing convenience in detecting and purifying the recombinant ESR2 protein during the following stages.

Human estrogen receptor beta (ESR2) is a nuclear hormone receptor that plays a crucial role in mediating the physiological effects of estrogen. It is a member of the steroid hormone receptor superfamily and is expressed in various tissues, including the reproductive, cardiovascular, and central nervous systems. ESR2 functions as a transcription factor, regulating gene expression in response to estrogen binding. Its activation influences diverse processes such as cell proliferation, differentiation, and apoptosis. ESR2 is particularly involved in modulating the effects of estrogen in non-reproductive tissues. Research on ESR2 has implications for understanding hormone-dependent diseases, including certain cancers and exploring therapeutic interventions related to hormonal regulation.

Reconstitution

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

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