

## Product datasheet for PH313277

### Estrogen Receptor 1 (ESR1) (NM\_000125) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	ESR1 MS Standard C13 and N15-labeled recombinant protein (NP_000116)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC213277
Predicted MW:	66 kDa
Protein Sequence:	>RC213277 representing NM_000125 Red=Cloning site Green=Tags(s)

MTMTLHTKASGMALLHQIQGNELEPLNRPQLKIPLERPLGEVYLDSSKPAVYNYPEGAAYEFNAAAAANA  
QVYQGQTGLPYGPGSEAAAFGSNGLGGFPPLNSVSPSPLMLLHPPPQLSPFLQPHGQQVPYYLENEPSGYT  
VREAGPPAFYRPNSDNRRQGGRERLASTNDKGSMAKESAKETRYCAVCNDYASGYHYGVWSCEGCKAFFK  
RSIQGHNDYMCATNQCTIDKNRRKSCQACRLRKCYEVGMMKGGIRKDRRGGRLKHKRQRDDGEGRGEV  
GSAGDMRAANLWPSPLMIKRSKKNLALSLTADQMVSAALLDAEPPILYSEYDPTPRPFSEASMMGLLTNLA  
DRELVHMINWAKRVPGFVDLTLHDQVHLLCAWLEILMIGLVWRSMEHPGKLLFAPNLLDRNQGKCVGE  
MVEIFDMLLATSSRFMMNLQGEFVCLKSIIILLNSGVYTFLSSTLKSLEEKDHIHRVLDKITDTLIHLM  
AKAGLTLQQHQRLAQLLLILSHIRHMSNKGMEHLYSMCKKNVPLYDLLEMLDAHRLHAPT SRGGASV  
EETDQSHLATAGTSSSHLQKYYITGEAEGFPATV

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<u>NP_000116</u>
RefSeq Size:	6456
RefSeq ORF:	1785



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**Synonyms:** ER; Era; ESR; ESRA; ESTRR; NR3A1

**Locus ID:** 2099

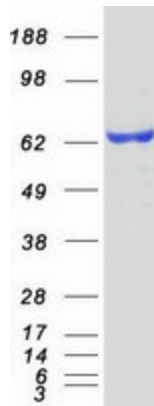
**UniProt ID:** [P03372](#), [G4XH65](#)

**Cytogenetics:** 6q25.1-q25.2

**Summary:** This gene encodes an estrogen receptor and ligand-activated transcription factor. The canonical protein contains an N-terminal ligand-independent transactivation domain, a central DNA binding domain, a hinge domain, and a C-terminal ligand-dependent transactivation domain. The protein localizes to the nucleus where it may form either a homodimer or a heterodimer with estrogen receptor 2. The protein encoded by this gene regulates the transcription of many estrogen-inducible genes that play a role in growth, metabolism, sexual development, gestation, and other reproductive functions and is expressed in many non-reproductive tissues. The receptor encoded by this gene plays a key role in breast cancer, endometrial cancer, and osteoporosis. This gene is reported to have dozens of transcript variants due to the use of alternate promoters and alternative splicing, however, the full-length nature of many of these variants remain uncertain. [provided by RefSeq, Jul 2020]

**Protein Families:** Druggable Genome, Nuclear Hormone Receptor, Transcription Factors

### Product images:



Coomassie blue staining of purified ESR1 protein (Cat# [TP313277]). The protein was produced from HEK293T cells transfected with ESR1 cDNA clone (Cat# [RC213277]) using MegaTran 2.0 (Cat# [TT210002]).