

## Product datasheet for PH326004

### Estrogen Receptor 1 (ESR1) (NM\_001122741) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	ESR1 MS Standard C13 and N15-labeled recombinant protein (NP_001116213)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC226004
Predicted MW:	66 kDa
Protein Sequence:	>RC226004 representing NM_001122741 Red=Cloning site Green=Tags(s)

MTMTLHTKASGMALLHQIQGNELEPLNRPQLKIPLERPLGEVYLDSSKPAVYNYPEGAAYEFNAAAAANA  
QVYQGQTGLPYGPGSEAAAFGSNGLGGFPPLNSVSPSPLMLLHPPPQLSPFLQPHGQQVPYYLENEPSGYT  
VREAGPPAFYRPNSDNRRQGGRERLASTNDKGSMAESAKETRYCAVCNDYASGYHYGVWSCEGCKAFFK  
RSIQGHNDYMCATNQCTIDKNRRKSCQACRLRKCYEVMGMMGGIRKDRRGGRLKHKRQRDDGEGRGEV  
GSAGDMRAANLWPSPLMIKRSKKNLALSLTADQMVSAALLDAEPPILYSEYDPTPRPFSEASMMGLLTNLA  
DRELVHMINWAKRVPGFVDLTLHDQVHLLCAWLEILMIGLVWRSMEHPGKLLFAPNLLDRNQGKCVGE  
MVEIFDMLLATSSRFMMNLQGEFVCLKSIIILLNSGVYTFLLSSTLKSLEEKDHIHRVLDKITDTLIHLM  
AKAGLTLQQQHQLAQLLLILSHIRHMSNKGMEHLYSMCKNVVPLYDLLEMLDAHRLHAPT SRGGASV  
EETDQSHLATAGTSSSHSLQKYYITGEAEGFPATV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

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:	<a href="#">NP_001116213</a>
RefSeq ORF:	1785
Synonyms:	ER; Era; ESR; ESRA; ESTRR; NR3A1



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Locus ID: 2099

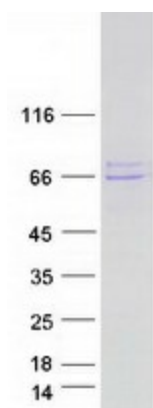
UniProt ID: [P03372](#), [G4XH65](#)

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# [TP326004]). The protein was produced from HEK293T cells transfected with ESR1 cDNA clone (Cat# [RC226004]) using MegaTran 2.0 (Cat# [TT210002]).