

## Product datasheet for **TP313277**

### Estrogen Receptor 1 (ESR1) (NM\_000125) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human estrogen receptor 1 (ESR1), transcript variant 1, 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>Peptide sequence encoded by RC213277 <b>Blue</b> =ORF <b>Red</b> =Cloning site <b>Green</b> =Tag(s)

MTMTLHTKASGMALLHQIQGNELEPLNRPQLKIPLERPLGEVYLDSSKPAVYNYPEGAAYEFNAAAAAN  
AQVYGQTGLPYGPGSEAAAFSGNGLGGFPPLNSVSPSPLMLLHPPPQLSPFLQPHGQQVPYYLENESG  
YTVREAGPPAFYRPNSDNRRQGGRERLASTNDKGSMAKESAKETRYCAVCNDYASGYHYGVWSCEGCKA  
FFKRISIQGHNDYMCPTNQCTIDKNRRKSCQACRLRKCYEVGMMKGGIRKDRRGGRMLKHKRQRDDGE  
G  
RGEVGSAGDMRAANLWPSPLMIKRSKKNLALSLTADQMVSALLDAEPPILYSEYDPTRPFSEASMMGL  
LTNLADRELHMINWAKRVPGFVDLTLDQVHLLECAWLEILMIGLVWRSMEHPGKLLFAPNLLDRNQ  
GKCVEGMVEIFDMLLATSSFRMMNLQGEEFVCLKSIILLNSGVYTLFSLTKSLEEKDHIHRVLDKIT  
DTLIHLMAKAGLTQQQHQLAQLLLILSHIRHMSNKGMEHLYSMCKKNVPLYDLLLEMLDAHRLHAP  
TSRGASVEETDQSHLATAGSTSSHSLQKYITGEAEGFPATV  
**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

Recombinant protein using RC213277 also available, [TP313277](#)

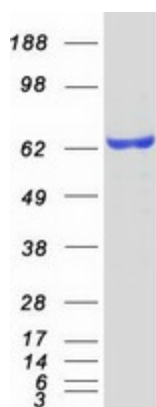
Tag:	C-Myc/DDK
Predicted MW:	66 kDa
Concentration:	>0.1 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Bioactivity:	Binding assay (PMID: <a href="#">28842010</a> )
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.



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<b>Storage:</b>	Store at -80°C.
<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<u>NP_000116</u>
<b>Locus ID:</b>	2099
<b>UniProt ID:</b>	<u>P03372</u>
<b>RefSeq Size:</b>	6456
<b>Cytogenetics:</b>	6q25.1-q25.2
<b>RefSeq ORF:</b>	1785
<b>Synonyms:</b>	ER; Era; ESR; ESRA; ESTRR; NR3A1
<b>Summary:</b>	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]
<b>Protein Families:</b>	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]).