

## **Product datasheet for TP313277M**

### OriGene Technologies, Inc.

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## 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, 100 μg

Species: Human Expression Host: HEK293T

Expression cDNA >RC213277 representing NM\_000125
Clone or AA Red=Cloning site Green=Tags(s)

Sequence:

MTMTLHTKASGMALLHQIQGNELEPLNRPQLKIPLERPLGEVYLDSSKPAVYNYPEGAAYEFNAAAAANA QVYGQTGLPYGPGSEAAAFGSNGLGGFPPLNSVSPSPLMLLHPPPQLSPFLQPHGQQVPYYLENEPSGYT VREAGPPAFYRPNSDNRRQGGRERLASTNDKGSMAMESAKETRYCAVCNDYASGYHYGVWSCEGCKAFFK RSIQGHNDYMCPATNQCTIDKNRRKSCQACRLRKCYEVGMMKGGIRKDRRGGRMLKHKRQRDDGEGRGEV GSAGDMRAANLWPSPLMIKRSKKNSLALSLTADQMVSALLDAEPPILYSEYDPTRPFSEASMMGLLTNLA DRELVHMINWAKRVPGFVDLTLHDQVHLLECAWLEILMIGLVWRSMEHPGKLLFAPNLLLDRNQGKCVEG MVEIFDMLLATSSRFRMMNLQGEEFVCLKSIILLNSGVYTFLSSTLKSLEEKDHIHRVLDKITDTLIHLM

AKAGLTLQQQHQRLAQLLLILSHIRHMSNKGMEHLYSMKCKNVVPLYDLLLEMLDAHRLHAPTSRGGASV

EETDQSHLATAGSTSSHSLQKYYITGEAEGFPATV

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV** 

Tag: C-Myc/DDK

**Predicted MW:** 66 kDa

**Concentration:** >0.1  $\mu$ g/ $\mu$ L 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: <u>28842010</u>)

**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.

**Storage:** Store at -80°C.





#### Estrogen Receptor 1 (ESR1) (NM\_000125) Human Recombinant Protein - TP313277M

Stable for 12 months from the date of receipt of the product under proper storage and handling

conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** NP 000116

**Locus ID:** 2099

**UniProt ID:** <u>P03372</u>, <u>G4XH65</u>

RefSeq Size: 6456

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

RefSeq ORF: 1785

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

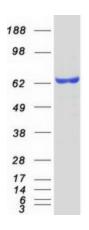
**Summary:** This gene encodes an estrogen receptor and ligand-activated transcription factor. The canonical

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]).