

Product datasheet for TP312143M

OriGene Technologies, Inc.

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Estrogen Related Receptor gamma (ESRRG) (NM 206594) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human estrogen-related receptor gamma (ESRRG), transcript variant 2,

100 µg

Species: Human
Expression Host: HEK293T

Expression cDNA Clone >RC212143 representing NM_206594 **or AA Sequence:** Red=Cloning site Green=Tags(s)

MSNKDRHIDSSCSSFIKTEPSSPASLTDSVNHHSPGGSSDASGSYSSTMNGHQNGLDSPPLYPSAPILGG SGPVRKLYDDCSSTIVEDPQTKCEYMLNSMPKRLCLVCGDIASGYHYGVASCEACKAFFKRTIQGNIEYS CPATNECEITKRRRKSCQACRFMKCLKVGMLKEGVRLDRVRGGRQKYKRRIDAENSPYLNPQLVQPAKKP YNKIVSHLLVAEPEKIYAMPDPTVPDSDIKALTTLCDLADRELVVIIGWAKHIPGFSTLSLADQMSLLQS AWMEILILGVVYRSLSFEDELVYADDYIMDEDQSKLAGLLDLNNAILQLVKKYKSMKLEKEEFVTLKAIA LANSDSMHIEDVEAVQKLQDVLHEALQDYEAGQHMEDPRRAGKMLMTLPLLRQTSTKAVQHFYNIKLEGK

VPMHKLFLEMLEAKV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK
Predicted MW: 48.4 kDa

Concentration: >0.05 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: WB positive control (PMID: <u>25496115</u>)

WB positive control (PMID: 27363015)

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 Related Receptor gamma (ESRRG) (NM_206594) Human Recombinant Protein – TP312143M

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 996317

Locus ID: 2104

UniProt ID: <u>P62508</u>, <u>F1D8R6</u>

RefSeq Size: 5369 Cytogenetics: 1q41 RefSeq ORF: 1305

Synonyms: ERR-gamma; ERR3; ERRg; ERRgamma; NR3B3

Summary: This gene encodes a member of the estrogen receptor-related receptor (ESRR) family, which

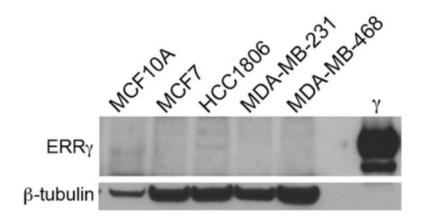
belongs to the nuclear hormone receptor superfamily. All members of the ESRR family share an almost identical DNA binding domain, which is composed of two C4-type zinc finger motifs. The ESRR members are orphan nuclear receptors; they bind to the estrogen response element and steroidogenic factor 1 response element, and activate genes controlled by both response elements in the absence of any ligands. The ESRR family is closely related to the estrogen receptor (ER) family. They share target genes, co-regulators and promoters, and by targeting the same set of genes, the ESRRs seem to interfere with the ER-mediated estrogen response in various ways. It has been reported that the family member encoded by this gene functions as a transcriptional activator of DNA cytosine-5-methyltransferases 1 (Dnmt1) expression by direct binding to its response elements in the DNMT1 promoters, modulates cell proliferation and estrogen signaling in breast cancer, and negatively regulates bone morphogenetic protein 2-induced osteoblast differentiation and bone formation. Multiple alternatively spliced transcript variants have been identified, which mainly differ at the 5' end and some of which encode

protein isoforms differing in the N-terminal region. [provided by RefSeq, Aug 2011]

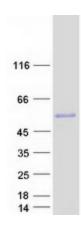
Protein Families: Druggable Genome, Nuclear Hormone Receptor, Transcription Factors



Product images:



Western blot analysis of basal estrogen-related receptor gamma (ERRgamma) expression in different mammary epithelial and breast cancer cell lines. OriGene [TP312143] serves as a positive control for ERRgamma. Figure cited from Oncotarget, PMID: 27363015



Coomassie blue staining of purified ESRRG protein (Cat# [TP312143]). The protein was produced from HEK293T cells transfected with ESRRG cDNA clone (Cat# [RC212143]) using MegaTran 2.0 (Cat# [TT210002]).