

**Anti-ESRRB / ERR Beta Antibody (Ligand-binding Domain)**  
**Rabbit Anti Human Polyclonal Antibody**  
**Catalog # ALS17489**

**Specification**

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**Anti-ESRRB / ERR Beta Antibody (Ligand-binding Domain) - Product Information**

|                   |   |
|-------------------|---|
| Application       | IHC-P   |
| Primary Accession | <a href="#">O95718</a>                                  |
| Predicted         | Human, Rabbit, Hamster, Monkey, Pig, Bovine, Horse, Dog |
| Host              | Rabbit  |
| Clonality         | Polyclonal  |
| Calculated MW     | 48054   |

**Anti-ESRRB / ERR Beta Antibody (Ligand-binding Domain) - Additional Information**

**Gene ID** 2103

**Alias Symbol** **ESRRB**

**Other Names**

ESRRB, DFNB35, ERRb, ERRbeta-2, ESRL2, Estrogen receptor-like 2, ERR-beta, ERRB2, ERRbeta, NR3B2, Nuclear receptor ERRB2, Orphan nuclear receptor, ERR beta-2, ERR2, Estrogen-related receptor 2, Estrogen-related receptor beta, Steroid hormone receptor ERR2

**Target/Specificity**

Human ESRRB. BLAST analysis of the peptide immunogen showed no homology with other human proteins, except ESRRG (67%).

**Reconstitution & Storage**

Immunoaffinity purified

**Precautions**

Anti-ESRRB / ERR Beta Antibody (Ligand-binding Domain) is for research use only and not for use in diagnostic or therapeutic procedures.

**Anti-ESRRB / ERR Beta Antibody (Ligand-binding Domain) - Protein Information**

**Name** ESRRB ([HGNC:3473](#))

**Synonyms** ERRB2, ESRL2, NR3B2

**Function**

[Isoform 3]: Transcription factor that binds a canonical ESRRB recognition (ERRE) sequence 5'TCAAGGTCA-3' localized on promoter and enhancer of targets genes regulating their expression or their transcription activity (PubMed:<a href="http://www.uniprot.org/citations/17920186" target="\_blank">17920186</a>, PubMed:<a href="http://www.uniprot.org/citations/19755138" target="\_blank">19755138</a>). Plays a role, in a LIF-independent manner, in maintenance of self-renewal and pluripotency of embryonic and trophoblast stem cells through different signaling

pathways including FGF signaling pathway and Wnt signaling pathways. Upon FGF signaling pathway activation, interacts with KDM1A by directly binding to enhancer site of ELF5 and EOMES and activating their transcription leading to self-renewal of trophoblast stem cells. Also regulates expression of multiple rod-specific genes and is required for survival of this cell type (By similarity). Plays a role as transcription factor activator of GATA6, NR0B1, POU5F1 and PERM1 (PubMed:<a href="http://www.uniprot.org/citations/23836911" target="\_blank">23836911</a>). Plays a role as transcription factor repressor of NFE2L2 transcriptional activity and ESR1 transcriptional activity (PubMed:<a href="http://www.uniprot.org/citations/17920186" target="\_blank">17920186</a>, PubMed:<a href="http://www.uniprot.org/citations/19755138" target="\_blank">19755138</a>). During mitosis remains bound to a subset of interphase target genes, including pluripotency regulators, through the canonical ESRRB recognition (ERRE) sequence, leading to their transcriptional activation in early G1 phase. Can coassemble on structured DNA elements with other transcription factors like SOX2, POU5F1, KDM1A and NCOA3 to trigger ESRRB-dependent gene activation. This mechanism, in the case of SOX2 corecruitment prevents the embryonic stem cells (ESCs) to epiblast stem cells (EpiSC) transition through positive regulation of NR0B1 that inhibits the EpiSC transcriptional program. Also plays a role inner ear development by controlling expression of ion channels and transporters and in early placentation (By similarity).

#### Cellular Location

Nucleus. Cytoplasm {ECO:0000250|UniProtKB:Q61539}. Chromosome {ECO:0000250|UniProtKB:Q61539}

#### Anti-ESRRB / ERR Beta Antibody (Ligand-binding Domain) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Anti-ESRRB / ERR Beta Antibody (Ligand-binding Domain) - Images