

ESRRB Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP9061c**Specification**

ESRRB Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [O95718](#)**ESRRB Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 2103**Other Names**

Steroid hormone receptor ERR2, ERR beta-2, Estrogen receptor-like 2, Estrogen-related receptor beta, ERR-beta, Nuclear receptor subfamily 3 group B member 2, ESRRB, ERB2, ESRL2, NR3B2

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP9061c](/products/AP9061c) was selected from the Center region of human ESRRB. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ESRRB Antibody (Center) Blocking Peptide - Protein Information**Name** ESRRB ([HGNC:3473](#))**Synonyms** ERB2, 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:[17920186](http://www.uniprot.org/citations/17920186), PubMed:[19755138](http://www.uniprot.org/citations/19755138)). 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. Involved in morula development (2-16 cells embryos) by acting as a regulator at the 8-cell stage (By similarity). 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:23836911). Plays a role as transcription factor repressor of NFE2L2 transcriptional activity and ESR1 transcriptional activity (PubMed:17920186, PubMed:19755138). 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}

ESRRB Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

ESRRB Antibody (Center) Blocking Peptide - Images

ESRRB Antibody (Center) Blocking Peptide - Background

ESRRB encodes a protein with similarity to the estrogen receptor. Its function is unknown; however, a similar protein in mouse plays an essential role in placental development.

ESRRB Antibody (Center) Blocking Peptide - References

Xu,J., et.al., Proc. Natl. Acad. Sci. U.S.A. 107 (5), 2136-2140 (2010) Bombail,V., et.al., Mol. Cell. Endocrinol. 314 (1), 53-61 (2010)