

# ARG43332 anti-Estrogen related Receptor beta antibody

Package: 50 μl Store at: -20°C

# Summary

Product Description	Rabbit Polyclonal antibody recognizes Estrogen related Receptor beta
Tested Reactivity	Hu
Predict Reactivity	Ms, Rat, Cow, Dog, Gpig, Hrs, Rb
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	lgG
Target Name	Estrogen related Receptor beta
Species	Human
Immunogen	Synthetic peptide around the N-terminal region of Human Estrogen related Receptor beta. (within the following region: SSDAS GGFGL ALGTH ANGLD SPPMF AGAGL GGTPC RKSYE DCASG IMEDS)
Conjugation	Un-conjugated
Alternate Names	ERR-beta; ERRb; ESRL2; NR3B2; Nuclear receptor subfamily 3 group B member 2; Steroid hormone receptor ERR2; ERR2; Estrogen receptor-like 2; DFNB35; ERR beta-2; Estrogen-related receptor beta

# **Application Instructions**

Predict Reactivity Note	Predicted Homology Based on Immunogen Sequence: Cow: 100%; Dog: 100%; Guinea pig: 100%; Horse: 100%; Mouse: 93%; Rabbit: 93%; Rat: 100%	
Application table	Application	Dilution
	WB	0.2 - 1 μg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	MCF7	
Observed Size	~ 55 kDa	

### Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS, 0.09% (w/v) Sodium azide and 2% Sucrose.
Preservative	0.09% (w/v) Sodium azide
Stabilizer	2% Sucrose
Concentration	Batch dependent: 0.5 - 1 mg/ml

Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

# Bioinformation

Gene Symbol	ESRRB
Gene Full Name	estrogen-related receptor beta
Background	This gene 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. [provided by RefSeq, Jul 2008]
Function	<ul> <li>[Isoform 3]: Transcription factor that binds a canonical ESRRB recognition (ERRE) sequence</li> <li>5'TCAAGGTCA-3' localized on promoter and enhancer of targets genes regulating their expression or their transcription activity (PubMed:17920186, PubMed:19755138). Plays a role, in a LIF-independent manner, in maintainance 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, POUSF1 and PERM1</li> <li>(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, POUSF1, 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).</li> <li>[Isoform 1]: 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 activ</li></ul>
Calculated Mw	48 kDa
PTM	Acetylated by PCAF/KAT2 (in vitro). [UniProt]
Cellular Localization	Nucleus. Cytoplasm. Chromosome. [UniProt]



#### ARG43332 anti-Estrogen related Receptor beta antibody WB image

Western blot: MCF7 cell lysate stained with ARG43332 anti-Estrogen related Receptor beta antibody at 0.2 - 1  $\mu g/ml$  dilution.