

Product datasheet for **AP06806PU-M**

Estrogen Receptor beta (ESR2) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, IF, WB
Recommended Dilution:	Western blot: 1/500-1/1000. Immunofluorescence: 1/50-1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to amino acids 71-120 of Human ER β .
Specificity:	The antibody detects endogenous levels of ER-beta protein. (region surrounding Glu101)
Formulation:	Phosphate buffered saline (PBS), pH~7.2 State: Aff - Purified State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE). Preservative: 0.05% Sodium Azide
Concentration:	1.0 mg/ml
Purification:	Affinity Chromatography using epitope-specific immunogen.
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 46, 60 kDa
Gene Name:	estrogen receptor 2
Database Link:	Entrez Gene 2100 Human Q92731



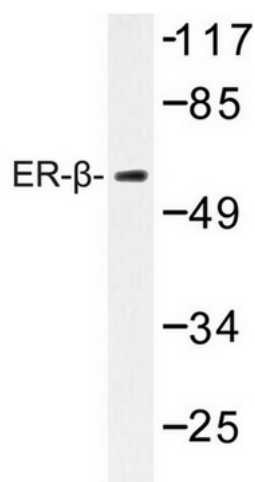
[View online »](#)

Background:

The discovery of a second estrogen receptor has redefined the estrogen signaling pathway and may have broad implications on estrogen-responsive tissues. The new estrogen receptor, named estrogen receptor-beta ($ER\beta$), is preferentially expressed in the prostate and maintains some characteristics that are different from $ER\alpha$.² The rat tissue distribution and/or the relative level of $ER\alpha$ and $ER\beta$ expression seems to be quite different, i.e., moderate to high expression in uterus, testis, pituitary, ovary, kidney, epididymis, and adrenal for $ER\alpha$ and prostate, ovary, lung, bladder, brain, bone, uterus, and testis for $ER\beta$. Within the same organ it often appears that the ER subtypes are expressed in different cell types, supporting the hypothesis that the ER's may have different biological functions. The discovery of $ER\beta$ suggests the existence of two previously unrecognized pathways of estrogen signaling, via the $ER\beta$ subtype in tissues exclusively expressing this subtype and via the formation of heterodimers in tissues expressing both ER subtypes. The existence of two ER subtypes, their differential expression pattern, and different actions on certain response elements could provide explanations for the striking species-, cell-, and promoter-specific actions of estrogens and antiestrogens.³ Both estrogen receptors appear to be involved in a multitude of regulatory events.

Synonyms:

ER-beta, ESR2, ESTRB, NR3A2

Product images:


Western blot (WB) analysis of ER-beta antibody in extracts from HeLa cells.