

## Product datasheet for **AM21050PU-N**

### Estrogen Receptor beta (ESR2) (F region) Mouse Monoclonal Antibody [Clone ID: ERbeta-2D7]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	ERbeta-2D7
Applications:	IHC
Recommended Dilution:	<b>Immunohistochemistry on Frozen Sections:</b> 5 µg/ml (1/100). <b>Immunohistochemistry on Paraffin Sections:</b> 2.5-5 µg/ml (1/50-1/100). Proteinase K pretreatment for antigen retrieval is recommended. <b>Suggested Positive Control:</b> ERs are widely expressed in different tissue types.
Reactivity:	Human, Mouse
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Peptide C512 to Q530 from murine ERβ. <b>Antigen:</b> Estrogen Receptor beta. <b>Epitope:</b> Located in the F region.
Specificity:	Monoclonal antibody 4ERβ-2D7 recognizes an epitope in the F region of the mouse and human Estrogen Receptor beta. The two different forms of the estrogen receptor, usually referred to as α and β, can form hormone-activated dimers, and, since the two forms are coexpressed in many cell types, the receptors may form ERα (αα) or ERβ (ββ) homodimers or ERαβ (αβ) heterodimers. Estrogen receptor alpha and beta show significant overall sequence homology, and both are composed of five domains (A-F domains listed from the N- to C-terminus). <b>Antigen Distribution:</b> The antigen has been described in kidney, brain, bone, heart, lungs, intestinal mucosa, prostate, and endothelial cells. No cross-reactivity has been observed with ER-alpha.
Formulation:	Stock solution contains 0.5 mg/ml IgG, PBS, pH 7.2 with 5mg/ml BSA as stabilizer and 0.09% sodium azide as a preservative. State: Aff - Purified State: Lyophilized purified Ig fraction
Reconstitution Method:	Restore by adding 0.5 ml distilled water.
Concentration:	0.5 mg/ml



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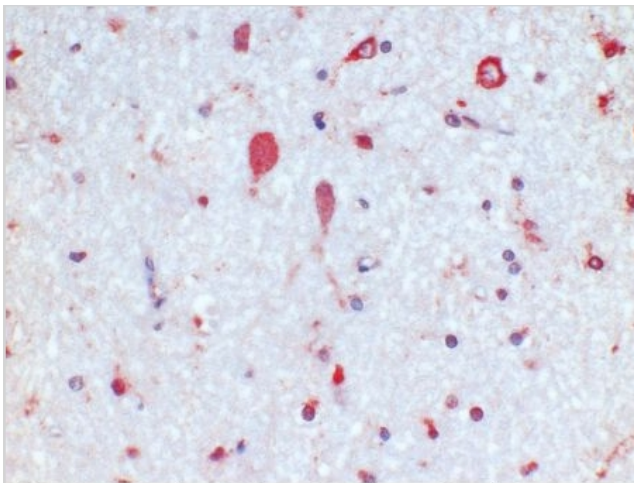
<b>Purification:</b>	Affinity Chromatography
<b>Conjugation:</b>	Unconjugated
<b>Storage:</b>	Store lyophilized at 2-8°C for 6 months or at -20°C long term. After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing.
<b>Stability:</b>	Shelf life: one year from despatch.
<b>Gene Name:</b>	estrogen receptor 2
<b>Database Link:</b>	<a href="#">Entrez Gene 13983 Mouse</a> <a href="#">Entrez Gene 2100 Human Q92731</a>

**Background:** ER exists in two types: alpha and Beta. They are similar in structure. The ligand binding domain and the DNA binding domain are highly conserved in these proteins while the N-terminal transactivating domain is diverged considerably. Five isoforms of the hER beta gene, designated hER beta 1-5 have been identified. ERBeta binds to estrogen and activates genes through direct interaction with estrogen specific gene elements (ERE's). ER-Beta RNA has been detected in human thymus, spleen, ovary and testis and in rat ovary and prostate. This tissue distribution overlaps but is not identical to that of ER - alphaRNA.

**Synonyms:** ER-beta, ESR2, ESTRB, NR3A2

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

### Product images:



. (Clone 4ERbeta-2D7) ESTRB antibody staining of Human Hypothalamus Paraffin Section.