

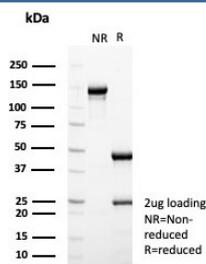
Estrogen Receptor alpha Antibody Rabbit Monoclonal [clone ESR1/8206R] (V5191)

Catalog No.	Formulation	Size
V5191-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5191-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5191SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Recombinant **RABBIT MONOCLONAL**

[Bulk quote request](#)

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	ESR1/8206R
Purity	Protein A/G affinity
UniProt	P03372
Localization	Nucleus
Applications	ELISA (Order BSA-free Format For Coating) :
Limitations	This Estrogen Receptor alpha antibody is available for research use only.



SDS-PAGE analysis of purified, BSA-free ESR1 antibody rabbit monoclonal ESR1/8206R as confirmation of integrity and purity.

Description

Estrogen Receptor alpha Antibody Rabbit Monoclonal ESR1/8206R recognizes Estrogen Receptor alpha, a ligand-

activated nuclear hormone receptor encoded by the ESR1 gene on chromosome 6q25.1. Estrogen Receptor alpha, commonly referred to as ER alpha, ER-A, or ESR1 in the literature, is a member of the nuclear receptor superfamily that functions as a transcription factor regulating genes involved in cell proliferation, differentiation, and endocrine signaling. Estrogen Receptor alpha Antibody Rabbit Monoclonal ESR1/8206R targets ER alpha protein for research applications involving hormone receptor biology and tumor marker analysis.

Structurally, Estrogen Receptor alpha contains a highly conserved DNA-binding domain composed of zinc finger motifs, a ligand-binding domain responsible for estrogen recognition, and activation function domains that modulate transcriptional activity. Upon binding estrogen, ESR1 undergoes conformational rearrangement that promotes receptor dimerization, nuclear localization, and interaction with transcriptional coactivators or corepressors. These molecular interactions enable ER alpha to bind estrogen response elements within promoter regions of target genes, thereby regulating gene networks controlling growth, survival, and reproductive tissue development.

Expression of ER alpha is most prominent in breast epithelium, endometrium, ovary, and additional hormone-responsive tissues. In oncology research, ESR1 expression status is a major biomarker in breast carcinoma and other estrogen-dependent malignancies. Variations in ESR1 signaling, amplification, splice variants, or point mutations can influence tumor biology and endocrine responsiveness. Beyond cancer research, ER alpha also contributes to bone density regulation, cardiovascular physiology, metabolic homeostasis, and neuroendocrine function, highlighting its broad biological relevance.

Estrogen Receptor alpha Antibody Rabbit Monoclonal ESR1/8206R enables investigation of ESR1 localization and expression in cellular and tissue-based research models. By targeting ER alpha protein, this antibody supports studies focused on estrogen signaling pathways, transcriptional regulation, and hormone-driven disease mechanisms. Detection of ER alpha remains central to understanding endocrine regulation in both normal physiology and pathological conditions.

Application Notes

Optimal dilution of the Estrogen Receptor alpha antibody should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 495-595) from the human protein was used as the immunogen for the Estrogen Receptor alpha antibody rabbit monoclonal ESR1/8206R.

Storage

Aliquot the Estrogen Receptor alpha antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.