

Product name:	ERR alpha (18W8) Rabbit Monoclonal Antibody
Cat number:	MABN10616
Conjugate:	Unconjugated
Size:	100µL
Clone:	Monoclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	A synthetic peptide of human Estrogen Related Receptor alpha
Reactivity:	Human, Mouse, Rat
Applications:	WB 1:1000-1:5000, FC 1:20-1:50, IP 1:20-1:50
Molecular Weight:	46kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New type preservative N and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.
Background:	Estrogen-related receptor alpha (ERRα/NR3B1) is an orphan nuclear receptor that controls transcription of genes involved in fatty acid oxidation, glucose metabolism, and mitochondrial biogenesis. The receptor protein contains a non-conserved amino terminal domain (NTD), a central zinc finger DNA binding domain, and a ligand-binding domain. The carboxy-terminal AF2 helix motif of ERRα contains binding sites for nuclear receptor coactivators PGC-1α and PGC-1β. Research studies demonstrate that ERRα transcriptional activity is regulated through phosphorylation and sumoylation within the NTD. Binds to an ERR-alpha response element (ERRE) containing a single consensus half-site, 5'-TNAAGGTCA-3'. Can bind to the medium- chain acyl coenzyme A dehydrogenase (MCAD) response element NRRE-1 and may act as an important regulator of MCAD promoter. Binds to the C1 region of the lactoferrin gene promoter. Requires dimerization and the coactivator, PGC-1A, for full activity. The ERRalpha/PGC1alpha complex is a regulator of energy metabolism. Induces the expression of PERM1 in the skeletal muscle.