

# Summary

Production Name	ERR alpha (18W8) Rabbit Monoclonal Antibody
Description	Rabbit Monoclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Mouse,Rat

#### Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	IgG
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New type
Buffer	preservative N and 50% glycerol. Store at +4°C short term. Store at -20°C long term.
	Avoid freeze / thaw cycle.
Purification	Affinity purification

## Immunogen

Gene Name	ESRRA	
Alternative Names	ESRRA; ERRa; ERR1; HERR1; NR3B1; Steroid hormone receptor ERR1; ERR-alpha;	
	ERRalpha; ESRL1; Estrogen receptor-like 1; Estrogen-related receptor alpha;	
Gene ID	2101.0	
SwissProt ID	P11474.	

# Application

Dilution Ratio	WB 1:1000~1:2000
Molecular Weight	46kDa



### 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 carboxyterminal 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.

## **Research Area**

### **Image Data**



Western blot analysis of ERR alpha expression in HeLa cell lysate.

#### Note

For research use only.