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**Product Name: ERR alpha (18W8) Rabbit Monoclonal Antibody****Catalog #: AMRe10616**

For research use only.

**Summary**

|                      |  |
|----------------------|--|
| <b>Description</b>   | Recombinant rabbit monoclonal antibody   |
| <b>Host</b>          | Rabbit   |
| <b>Application</b>   | WB,FC,IP   |
| <b>Reactivity</b>    | Human,Mouse,Rat  |
| <b>Conjugation</b>   | Unconjugated   |
| <b>Modification</b>  | Unmodified   |
| <b>Isotype</b>       | IgG  |
| <b>Clonality</b>     | Monoclonal   |
| <b>Form</b>          | Liquid   |
| <b>Concentration</b> | 0.5mg/ml. The concentration of this product may be batch-dependent.  |
| <b>Storage</b>       | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.  |
| <b>Shipping</b>      | Ice bags   |
| <b>Buffer</b>        | 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. |
| <b>Purification</b>  | Affinity purification  |

**Application**

|                         |  |
|-------------------------|--|
| <b>Dilution Ratio</b>   | WB 1:1000-1:5000,FC 1:20-1:50,IP 1:20-1:50 |
| <b>Molecular Weight</b> | 46kDa                                      |

**Antigen Information**

|                          |  |
|--------------------------|--|
| <b>Gene Name</b>         | ESRRA  |
| <b>Alternative Names</b> | ESRRA; ERRA; ERR1; HERR1; NR3B1; Steroid hormone receptor ERR1; ERR-alpha; ERRalpha; ESRL1; Estrogen receptor-like 1; Estrogen-related receptor alpha; |
| <b>Gene ID</b>           | 2101.0   |
| <b>SwissProt ID</b>      | P11474   |
| <b>Immunogen</b>         | A synthetic peptide of human Estrogen Related Receptor alpha   |

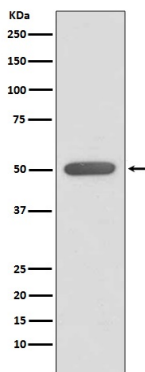
**Background**

Estrogen-related receptor alpha (ERR $\alpha$ /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 ERR $\alpha$  contains binding sites for nuclear receptor coactivators PGC-1 $\alpha$  and PGC-1 $\beta$ . Research studies demonstrate that ERR $\alpha$  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

Epigenetics and Nuclear Signaling

## Image Data



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