

### **ERR-alpha Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58566

### **Specification**

### **ERR-alpha Polyclonal Antibody - Product Information**

Application WB, IHC-P, IHC-F, IF, E

Primary Accession P11474
Reactivity Rat, Pic

Reactivity
Host
Clonality
Calculated MW
Physical State

Rat, Pig, Dog, Bovine
Rabbit
Polyclonal
47 KDa
Liquid

Immunogen KLH conjugated synthetic peptide derived

from human Estrogen Related Receptor

alpha

Epitope Specificity
Isotype
Purity

101-200/423
IgG

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Nucleus.

SIMILARITY Belongs to the nuclear hormone receptor

family. NR3 subfamily. Contains 1 nuclear

receptor DNA-binding domain.

SUBUNIT Binds DNA as a monomer or a homodimer.

Interacts (via the AF2 domain) with

coactivator PPARGC1A (via the L3 motif);

the interaction greatly enhances

transriptional activity of genes involved in energy metabolism. Interacts with PIAS4; the interaction enhances sumoylation.

Important Note

This product as supplied is intended for research use only, not for use in human.

therapeutic or diagnostic applications.

### **Background Descriptions**

affinity purified by Protein A

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.

## **ERR-alpha Polyclonal Antibody - Additional Information**

Gene ID 2101

Other Names



Steroid hormone receptor ERR1, Estrogen receptor-like 1, Estrogen-related receptor alpha, ERR-alpha, Nuclear receptor subfamily 3 group B member 1, ESRRA, ERR1, ESRL1, NR3B1

#### **Dilution**

- <span class ="dilution WB">WB~~1:1000</span><br \><span class</pre>
- ="dilution\_IHC-P">IHC-P~~N/A</span><br \> <span class
- ="dilution IHC-F">IHC-F~~N/A</span><br \><span class
- ="dilution IF">IF~~1:50~200</span><br/>span class = "dilution <math>E">E~~N/A</span>

#### **Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

### **Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

## **ERR-alpha Polyclonal Antibody - Protein Information**

Name ESRRA

Synonyms ERR1, ESRL1, NR3B1

### **Function**

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.

#### **Cellular Location**

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00407, ECO:0000269|PubMed:18063693, ECO:0000269|PubMed:21190936}. Cytoplasm. Note=Co-localizes to the cytoplasm only in presence of MAPK15.

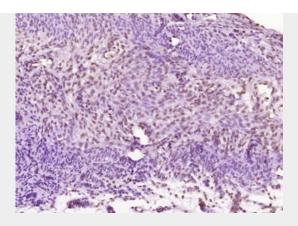
## **ERR-alpha Polyclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

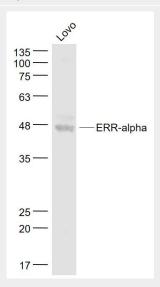
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### **ERR-alpha Polyclonal Antibody - Images**





Paraformaldehyde-fixed, paraffin embedded (Mouse uterus); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ERR-alpha) Polyclonal Antibody, Unconjugated (bs-6998R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



# Sample:

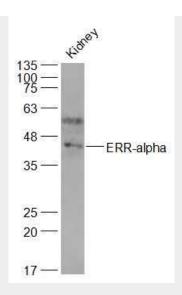
Lovp(Human) Cell Lysate at 30 ug

Primary: Anti- ERR-alpha (bs-6998R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 47 kD Observed band size: 47 kD





Sample:

Kidney (Mouse) Lysate at 40 ug

Primary: Anti-ERR-alpha (bs-6998R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 47 kD Observed band size: 47 kD