

# **ERR-alpha Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58566

#### **Product Information**

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

Primary Accession P11474

**Reactivity** Rat, Pig, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 45510
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human Estrogen Related

Receptor alpha

Epitope Specificity 101-200/423

Isotype IgG

**Purity** affinity purified by Protein A

**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**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.

## **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** WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:50-200,ELISA=1:5000-

10000

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

### **Protein Information**

Name ESRRA

Synonyms ERR1, ESRL1, NR3B1

**Function** Binds to an ERR-alpha response element (ERRE) containing a single

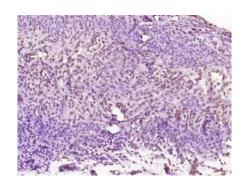
consensus half-site, 5'-TNAAGGTCA-3'. Can bind to the medium- chain acyl coenzyme A dehydrogenase (MCAD) response element NRRE-1 and may act as an important regulator of MCAD promoter. Binds to the C1 region of the lactoferrin gene promoter. Requires dimerization and the coactivator, PGC-1A, for full 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,

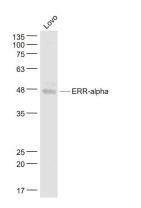
ECO:0000269 | PubMed:18063693, ECO:0000269 | PubMed:21190936}.

Cytoplasm. Note=Co-localizes to the cytoplasm only in presence of MAPK15.

## **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 (AP58566) 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 (AP58566) 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:

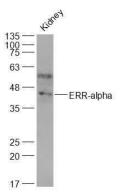
Kidney (Mouse) Lysate at 40 ug

Primary: Anti-ERR-alpha (AP58566) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at

1/20000 dilution

Predicted band size: 47 kD

Observed band size: 47 kD



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.