



ERRα Mouse mAb

Catalog No	YP-mAb-18928
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	ESRRA ERR1 ESRL1 NR3B1
Immunogen	Synthesized peptide derived from human protein . at AA range: 160-240
Specificity	ERR1 Polyclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal,Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000; ELISA 1:5000-20000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ESRRA ERR1 ESRL1 NR3B1;ERRα(Estrogen Related Receptor Alpha);Steroid hormone receptor ERR1;Estrogen receptor-like 1;Estrogen-related receptor alpha;ERR-alpha;Nuclear receptor subfamily 3 group B member 1
Observed Band	46kD
Calculated Molecular Weight	Steroid hormone receptor ERR1 ; Estrogen receptor-like 1 ; Estrogen-related receptor alpha ; ERR-alpha ; Nuclear receptor subfamily 3 group B member 1 ;
Cell Pathway	Nucleus . Cytoplasm . Co-localizes to the cytoplasm only in presence of MAPK15. .
Tissue Specificity	Brain,Cervix,Colon,Epithelium,Kidney,Lung,Placenta,Uterus,
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.,induction:Induced by PGC1alpha in a number of specific cell types including heart, kidney and muscle.,PTM:Phosphorylation on Ser-19 enhances sumoylation on Lys-14 increasing repression of transcriptional activity., PTM:Sumoylated by SUMO2. Main site is Lys-14 which is enhanced by



phosphorylation on Ser-19, cofactor activation, and by interaction with PIAS4. Sumoylation enhances repression of transcriptional activity, but has no effect on subcellular location nor on DNA binding. similarity: Belongs to the nuclear hormone receptor family. similarity: Belongs to the nuclear hormone receptor family. NR3 subfamily. similarity: 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 transcriptional activity of genes involved in energy metabolism. Interacts with PIAS4; the interaction enhances sumoylation.

Background

The protein encoded by this gene is a nuclear receptor that is closely related to the estrogen receptor. This protein acts as a site-specific transcription regulator and has been also shown to interact with estrogen and the transcription factor TFIIB by direct protein-protein contact. The binding and regulatory activities of this protein have been demonstrated in the regulation of a variety of genes including lactoferrin, osteopontin, medium-chain acyl coenzyme A dehydrogenase (MCAD) and thyroid hormone receptor genes. A processed pseudogene of ESRRA is located on chromosome 13q12.1. Alternatively spliced transcript variants have been found for this gene.

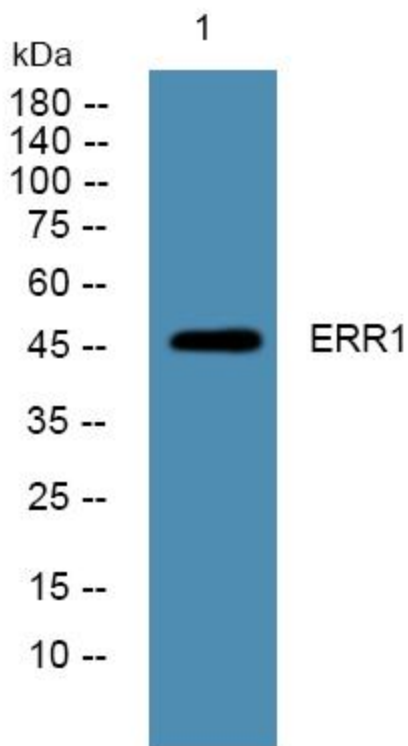
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western blot analysis of lysates from DU145 cells, primary antibody was diluted at 1:1000, 4° over night