

Anti-Estrogen Receptor beta ESR2 Rabbit Monoclonal Antibody

Catalog # ABO14293

Specification

Anti-Estrogen Receptor beta ESR2 Rabbit Monoclonal Antibody - Product Information

Application	
Primary Accession	
Host	
Isotype	
Reactivity	
Clonality	
Format	
Description	
Anti Estragon Docont	or boto ESD2 Dobbit M

WB, IHC <u>092731</u> Rabbit Rabbit IgG Human Monoclonal Liquid

Anti-Estrogen Receptor beta ESR2 Rabbit Monoclonal Antibody . Tested in WB, IHC applications. This antibody reacts with Human.

Anti-Estrogen Receptor beta ESR2 Rabbit Monoclonal Antibody - Additional Information

Gene ID 2100

Other Names Estrogen receptor beta, ER-beta, Nuclear receptor subfamily 3 group A member 2, ESR2, ESTRB, NR3A2

Calculated MW 59216 MW KDa

Application Details WB 1:500-1:2000
IHC 1:50-1:200

Subcellular Localization Nucleus.

Tissue Specificity

Isoform beta-1 is expressed in testis and ovary, and at a lower level in heart, brain, placenta, liver, skeletal muscle, spleen, thymus, prostate, colon, bone marrow, mammary gland and uterus. Also found in uterine bone, breast, and ovarian tumor cell lines, but not in colon and liver tumors. Isoform beta-2 is expressed in spleen, thymus, testis and ovary and at a lower level in skeletal muscle, prostate, colon, small intestine, leukocytes, bone marrow, mammary gland and uterus. Isoform beta-3 is found in testis. Isoform beta-4 is expressed in testis, and at a lower level in spleen, thymus, ovary, mammary gland and uterus. Isoform beta-5 is expressed in testis, placenta, skeletal muscle, spleen and leukocytes, and at a lower level in heart, lung, liver, kidney, pancreas, thymus, prostate, colon, small intestine, bone marrow, mammary gland and uterus. Not expressed in brain.

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.



Immunogen

A synthesized peptide derived from human Estrogen Receptor beta

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-Estrogen Receptor beta ESR2 Rabbit Monoclonal Antibody - Protein Information

Name ESR2

Synonyms ESTRB, NR3A2

Function

Nuclear hormone receptor. Binds estrogens with an affinity similar to that of ESR1/ER-alpha, and activates expression of reporter genes containing estrogen response elements (ERE) in an estrogen- dependent manner (PubMed:>20074560).

Cellular Location Nucleus {ECO:0000255|PROSITE-ProRule:PRU00407, ECO:0000269|PubMed:19126643, ECO:0000269|PubMed:20074560}

Tissue Location

[Isoform 1]: Expressed in testis and ovary, and at a lower level in heart, brain, placenta, liver, skeletal muscle, spleen, thymus, prostate, colon, bone marrow, mammary gland and uterus Also found in uterine bone, breast, and ovarian tumor cell lines, but not in colon and liver tumors. [Isoform 4]: Expressed in the testis. [Isoform 6]: Expressed in testis, placenta, skeletal muscle, spleen and leukocytes, and at a lower level in heart, lung, liver, kidney, pancreas, thymus, prostate, colon, small intestine, bone marrow, mammary gland and uterus. Not expressed in brain.

Anti-Estrogen Receptor beta ESR2 Rabbit Monoclonal Antibody - Protocols

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

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

Anti-Estrogen Receptor beta ESR2 Rabbit Monoclonal Antibody - Images





All lanes use the Antibody at 1:2K dilution for 1 hour at room temperature.



Immunohistochemical analysis of paraffin-embedded human cervix cancer, using Estrogen Receptor beta Antibody.



Figure 1. Western blot analysis of ESR2 using anti-ESR2 antibody (M00786-1).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human MCF-7 whole cell lysates,



Lane 2: human SH-SY5Y whole cell lysates,

Lane 3: human K562 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-ESR2 antigen affinity purified monoclonal antibody (Catalog # M00786-1) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for ESR2 at approximately 59 kDa. The expected band size for ESR2 is at 59 kDa.