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ESX1 Antibody
Catalog # ASC11063

Specification

ESX1 Antibody - Product Information

Application	**WB, IHC, IF**
Primary Accession	Q8N693
Other Accession	Q8N693, 116241356
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**ESX1 antibody can be used for detection of ESX1 by Western blot at 1 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL.**

ESX1 Antibody - Additional Information

Gene ID	**80712**

Target/Specificity
ESX1;

Reconstitution & Storage
ESX1 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions
ESX1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ESX1 Antibody - Protein Information

Name ESX1

Synonyms ESX1L, ESX1R

Function
May coordinately regulate cell cycle progression and transcription during spermatogenesis. Inhibits degradation of polyubiquitinated cyclin A and cyclin B1 and thereby arrests the cell cycle at early M phase. ESXR1-N acts as a transcriptional repressor. Binds to the sequence 5'-TAATGTTATTA-3' which is present within the first intron of the KRAS gene and inhibits its expression. ESXR1-C has the ability to inhibit cyclin turnover.

Cellular Location
Cytoplasm. Nucleus {ECO:0000255|PROSITE-ProRule:PRU00108,

ECO:0000269|PubMed:15235584} Note=ESXR1-N localizes specifically to the nucleus while ESXR1-C localizes specifically to the cytoplasm

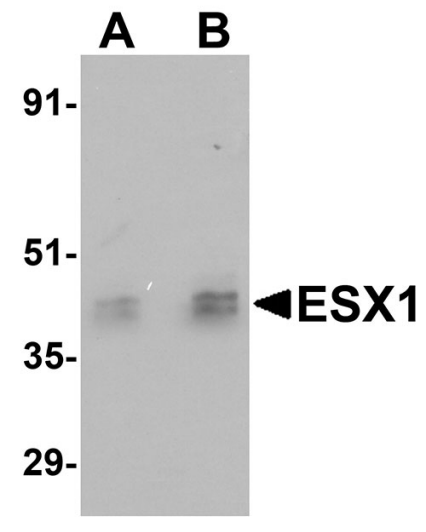
Tissue Location
Expressed in placenta and testis. Expressed in testicular germ cell tumors.

ESX1 Antibody - Protocols

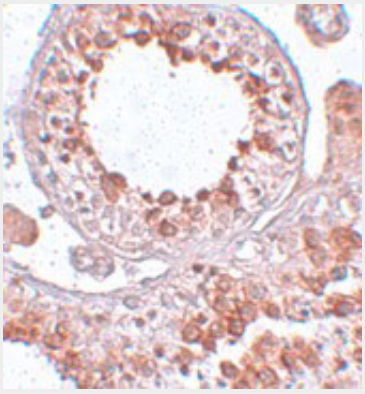
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ESX1 Antibody - Images

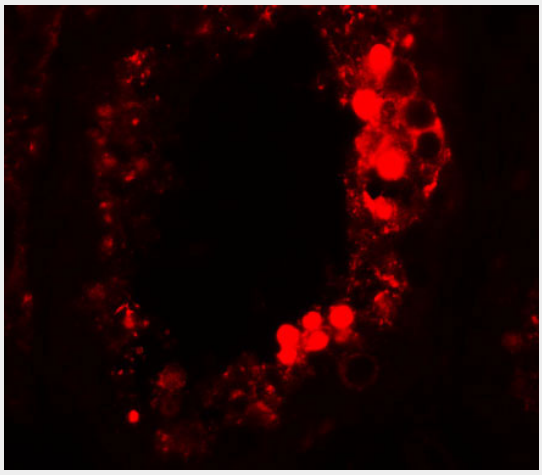


Western blot analysis of ESX1 in human testis tissue lysate with ESX1 antibody at (A) 1 and (B) 2 µg/mL.



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Immunohistochemistry of ESX1 in human testis tissue with ESX1 antibody at 2.5 µg/mL.



Immunofluorescence of ESX1 in human testis tissue with ESX1 antibody at 20 µg/mL.

ESX1 Antibody - Background

ESX1 Antibody: Homeobox proteins are transcription factors that contain a helix-turn-helix DNA binding domain termed the homeodomain. ESX1 is an X-linked homeobox gene primarily expressed in the placenta and testis and contains two functional domains: the homeodomain and the proline-rich domain. During embryogenesis, ESX1 is expressed in the extraembryonic tissues, including the endoderm of the visceral yolk sac, the ectoderm of the chorion and the labyrinthine trophoblast of the chorioallantoic placenta. ESX1 can act like a transcriptional repressor to the human oncogene K-ras and treatment of human cancer cells with an ESX1 protein fragment containing the homeodomain reduces the tumorgenicity of cells containing oncogenic K-ras mutations, suggesting ESX1 may be useful as a therapeutic treatment for these cancers.

ESX1 Antibody - References

Gehring WJ, Affolter M and Burglin T. Homeodomain proteins. Annu. Rev. Biochem.1994; 63:487-526.
Fohn LE and Behringer RR. ESX1L, a novel X chromosome-linked human homeobox gene expressed in the placenta and testis. Genomics2001; 74:105-8.
Li Y, Lemaire P and Behringer RR. ESX1, a novel X chromosome-linked homeobox gene expressed in mouse extraembryonic tissues and male germ cells. Dev. Biol.1997; 188:85-95.
Figueiredo AL, Salles MG, Albano RM, et al. Molecular and morphogenic analyses of expression of ESX1L in different stages of human placental development. J. Cell Mol. Med.2004; 8:545-50.