

VASA (H-80): sc-67185

BACKGROUND

VASA is a 724 amino acid, ATP-dependent RNA helicase that belongs to the DEAD-box family. VASA is specifically expressed in germline cells throughout the life cycle and is undetectable in somatic tissues. In vertebrates, VASA is restricted to bisexually reproducing organisms. It is cytoplasmic and is present only in migratory primordial germ cells in the region of the gonadal ridge. On testicular sections, VASA expression is the highest in spermatogonia, reduced in spermatocytes, low in spermatids and absent in sperm. In the ovary, VASA expression is the highest in oogonia but persists throughout oogenesis. VASA has a glycine-rich N-terminus with multiple repeats of an RGG motif believed to function in RNA binding. Specifically, it regulates the translation of intricate mRNAs that are essential for differentiation.

CHROMOSOMAL LOCATION

Genetic locus: DDX4 (human) mapping to 5q11.2; Ddx4 (mouse) mapping to 13 D2.2.

SOURCE

VASA (H-80) is a rabbit polyclonal antibody raised against amino acids 631-710 mapping near the C-terminus of VASA of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

VASA (H-80) is recommended for detection of VASA of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

VASA (H-80) is also recommended for detection of VASA in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for VASA siRNA (h): sc-61772, VASA siRNA (m): sc-61773, VASA shRNA Plasmid (h): sc-61772-SH, VASA shRNA Plasmid (m): sc-61773-SH, VASA shRNA (h) Lentiviral Particles: sc-61772-V and VASA shRNA (m) Lentiviral Particles: sc-61773-V.

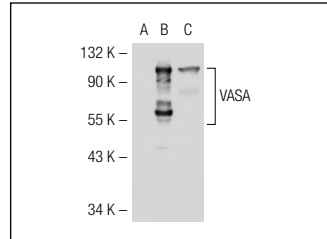
Molecular Weight of VASA: 83 kDa.

Positive Controls: rat testis extract: sc-2400 or VASA (h): 293T Lysate: sc-111520.

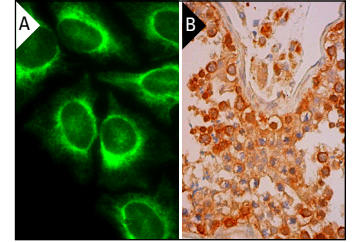
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



VASA (H-80): sc-67185. Western blot analysis of VASA expression in non-transfected: sc-117752 (A) and human VASA transfected: sc-111520 (B) 293T whole cell lysates and rat testis tissue extract (C).



VASA (H-80): sc-67185. Immunofluorescence staining of methanol-fixed HeLa cells showing perinuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing perinuclear and cytoplasmic staining of cells in seminiferous ducts and cytoplasmic staining of Leydig cells (B).

SELECT PRODUCT CITATIONS

- Simon, L., et al. 2010. ETV5 regulates sertoli cell chemokines involved in mouse stem/progenitor spermatogonia maintenance. *Stem Cells* 28: 1882-1892.
- Pinto, M.E., et al. 2010. Neonatal gonocyte differentiation in Mongolian gerbil *Meriones unguiculatus* involves asynchronous maturation of seminiferous cords and rapid formation of transitional cell stage. *Anat. Rec.* 293: 310-419.
- Wu, L.M., et al. 2012. Inhibition of follicular development induced by chronic unpredictable stress is associated with growth and differentiation factor 9 and gonadotropin in mice. *Biol. Reprod.* 86: 121.
- Zogbi, C., et al. 2012. Gonocyte development in rats: proliferation, distribution and death revisited. *Histochem. Cell Biol.* 138: 305-322.
- Cakici, C., et al. 2013. Recovery of fertility in azoospermia rats after injection of adipose-tissue-derived mesenchymal stem cells: the sperm generation. *Biomed Res. Int.* 2013: 529589.
- Naeemipour, M., et al. 2013. Expression dynamics of pluripotency genes in chicken primordial germ cells before and after colonization of the genital ridges. *Mol. Reprod. Dev.* 80: 849-861.


 MONOS
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Try **VASA (2F9H5): sc-293158** or **VASA (L18Z): sc-80427**, our highly recommended monoclonal alternatives to VASA (H-80).