

Thermo Scientific Steroidogenic Factor-1 (SF-1), Clone N1665**Mouse Monoclonal antibody****Catalog # MS-1946-P or -P0 (1.0ml or 0.1ml Purified Ab in BSA and Azide)****Catalog # MS-1946-R7 (7.0ml) (Ready-to-Use for Immunohistochemistry)****Catalog # MS-1946-RQ (12.0ml) (Ready-to-Use for Immunohistochemistry)****Please note this data sheet has been changed effective February 20, 2017**

Description: Steroidogenic Factor 1 (SF-1) is an orphan nuclear receptor belonging to the NR5A subgroup involved in gonadal and adrenal development. It may regulate genes by forming homodimers, heterodimers or as a monomer. A study by Y Tian et al suggests a significant correlation between the expression levels of SF-1 and StAR and stage of endometriosis in ectopic endometria; with higher levels observed in early stage. SF-1 is valuable in differential diagnosis of various types of ovarian tumors as well as in detecting endometrioid alterations². SF-1 is a highly sensitive and specific differential diagnosis marker of ovarian sertoli cell tumors⁴. SF-1 expression is of stage-independent prognostic value in adrenocortical tumors and in determining adrenocortical origin of an adrenal mass³. SF-1 plays a key role in the development of steroidogenic tissues, the regulatory of steroid biosynthesis and the pathogenesis of adrenocortical carcinoma⁵.

Mol. Wt. Of Antigen: ~55kDa**Epitope:** not determined**Ig Isotype:** Mouse IgG₁**Species Reactivity:** Human. Others not tested**Clone Designation:** N1665**Immunogen:** E.coli expressed recombinant SF-1 (220-461 aa)**Applications and Suggested Dilutions:**

- Immunohistochemistry (Formalin/paraffin)
(Use Ab at 1:30 for 60min at RT using UltraVision LP Detection System)

(Use Ab at 1:20 for 60min at RT using UltraVision Quanto Detection System)

*(Staining of formalin-fixed paraffin-embedded tissue sections requires treating the tissue sections in antigen retrieval buffer HIER Buffer M (Cat. #TA-135-HBM) after deparaffinization by heating to 98°C for 20 min using the Thermo Scientific PT Module)

The optimal dilution for a specific application should be determined by the investigator.

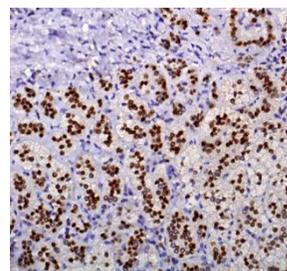
Positive Control: Adrenal gland and spleen**Cellular Localization:** nuclear with occasional cytoplasmic
Supplied As: Antibody purified from ascites prepared in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide.

or

Prediluted antibodies (-R7 or -RQ) which are ready-to-use for Immunohistochemistry with UltraVision LP Detection Systems or UltraVision Quanto Detection Systems respectively.

Storage and Stability:

Store vial at 4°C. When stored at 2-8°C, this antibody is stable for 24 months.



Formalin-fixed, paraffin-embedded human adrenal gland stained with Thermo Scientific SF-1 (Cat. #MS-1946) using UltraVision Quanto HRP Detection System with DAB Quanto.

References:

- 1) Mlynarczuk, J and R. Rekawiecki. The role of the orphan receptor SF-1 in the development and function of the ovary. *Reproductive Biol* 2010, Vol 10 (3): 177-193
- 2) Tian Y et al. Expression of Steroidogenic Factor 1 (SF-1) and Steroidogenic Acute Regulatory Protein (StAR) in Endometriosis is Associated with Endometriosis Severity. *The J of Internal Med Res* 2009, 37: 1389-1395
- 3) Almeida MQ et al. Steroidogenic Factor 1 Overexpression and Gene Amplification Are More Frequent in Adrenocortical Tumors from Children than from Adults. *Endocrine Res March* 2010, 35(3):1458-1462
- 4) Zhao C et al. SF-1 is a Diagnostically Useful Immunohistochemical Marker and Comparable to Other Sex Cord-Stromal Tumor Markers for the



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Differential Diagnosis of Ovarian Sertoli Cell Tumor. Internal. J for Gynea. Path 2010, 27:507–514

- 5) Carey RM et al. Adrenal Disease Update 2011. J Clin Endocrinol Metab, Dec 2011, 96(12):3583-3591

Limitations and Warranty:

Our products are intended FOR RESEARCH USE ONLY and are not approved for clinical diagnosis, drug use or therapeutic procedures. No products are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our data sheets and website. Our warranty is limited to the actual price paid for the product. Lab Vision is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

Material Safety Data:

This product is not licensed or approved for administration to humans or to animals other than the experimental animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin and eye contact, inhalation, and ingestion. The material contains $\leq 0.1\%$ sodium azide as a preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material as indicated above. The National Institute of Occupational Safety and Health has issued a bulletin citing the potential explosion hazard due to the reaction of sodium azide with copper, lead, brass, or solder in the plumbing systems. Sodium azide forms hydrazoic acid in acidic conditions and should be discarded in a large volume of running water to avoid deposits forming in metal drainage pipes.

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