

Cell Marque™ Tissue Diagnostics

SF-1 (EP434)

Rabbit Monoclonal Primary Antibody

As both a nuclear receptor and nuclear transcription factor, Steroidogenic factor-1 (SF-1) serves as an important modulator of steroidogenesis.^{1,2} It has been demonstrated that SF-1 serves as a “master regulator” in varying facets of development and function in both reproductive and adrenal tissues.¹ Immunohistochemical detection of SF-1 in testicular tissue may provide value for distinguishing sex-cord stromal tumors, including Leydig cell, Sertoli cell and granulosa cell neoplasms, from other tumors.^{2,3} In addition, SF-1 detection may have utility in distinguishing primary adrenal cortical lesions from their histologic mimics such as renal clear cell carcinoma.⁴

References:

1. El-Khairi, R et al. Steroidogenic Factor-1 and Human Disease. *Seminars in Reproductive Medicine* 2012 30: 374-381.
2. Sangoi AR et al. Evaluation of SF-1 Expression in Testicular Germ Cell Tumors: A Tissue Microarray Study of 127 cases. *Applied Immunohistochemistry and Molecular Morphology* 2013 21: 318-321.
3. Zhao, C et al. Identification of the Most Sensitive and Robust Immunohistochemical Markers in Different Categories of Ovarian Sex Cord-stromal Tumors. *American Journal of Surgical Pathology* 2009 33: 354-365.
4. Sangoi, AR et al. Immunohistochemical distinction of primary adrenal cortical lesions from metastatic clear cell renal carcinoma: a study of 248 cases. *American Journal of Surgical Pathology* 2011 35: 678-686.

Intended Use:

SF-1 (EP434) Rabbit Monoclonal Primary Antibody is intended for laboratory use in the detection of the steroidogenic factor-1 protein in formalin-fixed, paraffin-embedded tissue stained in qualitative immunohistochemistry (IHC) testing. This product is not a stand-alone diagnostic, and cannot be used for diagnosis, treatment, prevention, or mitigation of disease.

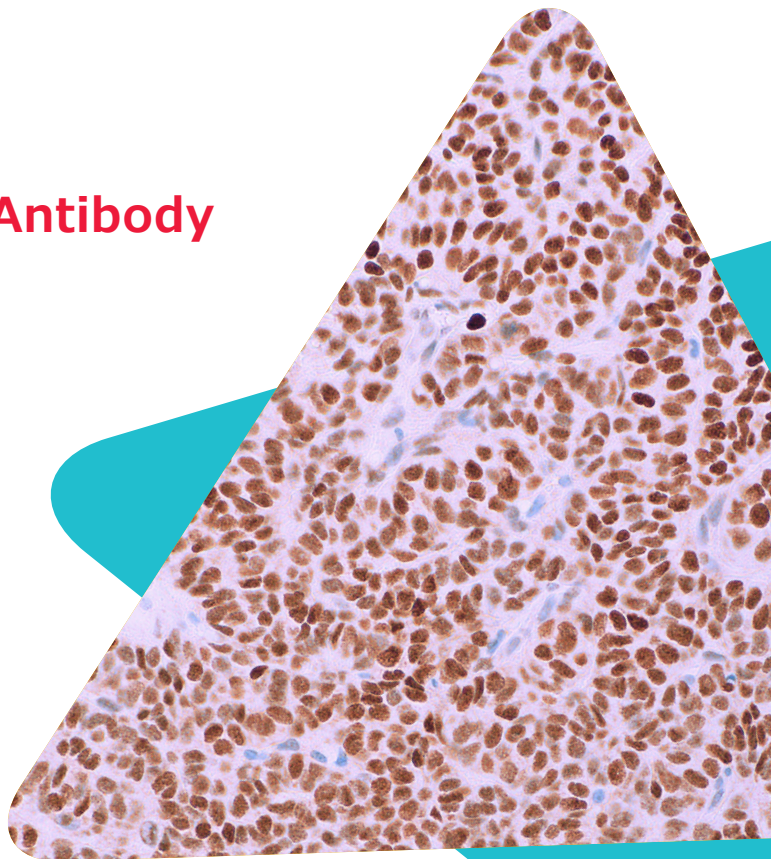
Product Information:

Visualization: Nuclear

Controls: Adrenocortical Carcinoma, Testis, Granulosa Cell Tumor

Dilution Range: 1:25-1:100

Associated Specialty: Genitourinary (GU) Pathology

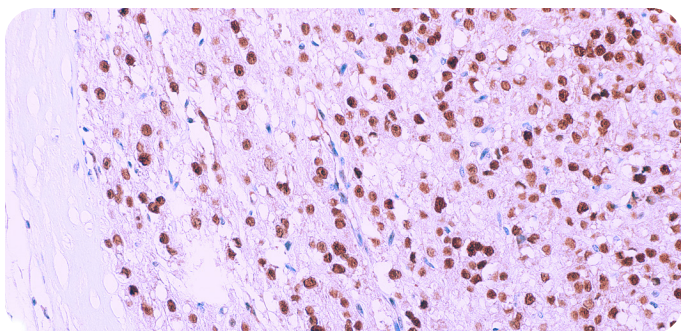


SF-1 on granulosa cell tumor

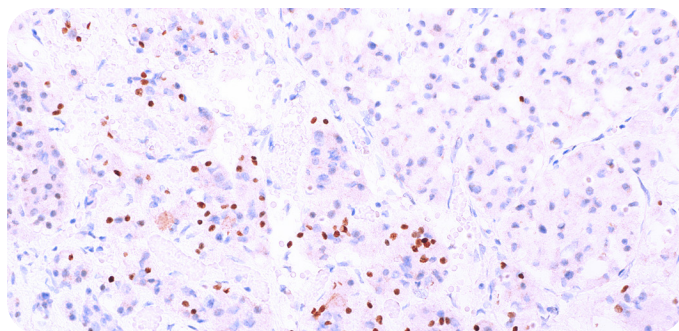
Ordering Information

Description	Cat No.
0.1 mL concentrate	462R-14
0.5 mL concentrate	462R-15
1.0 mL concentrate	462R-16
1.0 mL predilute	462R-17
7.0 mL predilute	462R-18





SF-1 on Leydig cell tumor



SF-1 on pituitary

Protein Expression Frequencies Aggregate in Sex Cord-Stromal Tumors and Histologic Mimics

Lesions	SF-1	STAR	CD99	CK	Vim	Inhibin, alpha	CR	N-bCTN	EMA	MART-1	SALL4
Leydig Cell Tumor	+	+	+	-	+	+	+	-	-	+	-
Sertoli-Leydig Cell Tumor	+	+	+	+	+	+	+	+	-	+	-
Sertoli Cell Tumor	+	-	+	+	+	+/-	+/-	+	-	-	-
Granulosa Cell Tumor	+	+ ^b	+	-/+	+	+	+	-	-	-	-
Microcystic Stromal Tumor	+		+	-	+	-	-	+	-	-	-
Fibroma/Thecoma	+ ^a	-	-	-	+	+	+	-	-	-	-
Sex Cord Tumor with Annular Tubules	+		+	-/+	+	+	+		-	+	
Ovarian Carcinoma, Endometrioid	-		-	+		-	-	-	+	-	-
Carcinoid	-		-/+	+	-	-	-	+/- ^c	+	-	-
Germ Cell Tumors	-	-	-/+	-/+	+/-	-	-	-	-/+	-	+

CK, cytokeratin, labeled with the antibody clones AE1/AE3 and CK8/18; CR, calretinin; N-bCTN, nuclear beta-catenin; Vim, vimentin.

^a in 10/11 of luteinized thecoma. ^b weak and focal. ^c data from a limited number of cases.

Distinction of Adrenocortical Neoplasms from its Histological Mimics

Tumors	SF-1	STAR	Inhibin, alpha	CR	MART-1	SYN	CgA	NF	GATA3	CK 8 & 18	EMA
Adrenocortical Adenoma	+	+	+	+	+	-/+	-	-	-	-/+	-
Adrenocortical Carcinoma	+	+	+	+	+	-/+	-	-	-	-/+	-
Pheochromocytoma	-	-	-	-	-	+	+	+	+	-	-
Renal Cell Carcinoma	-	-	-	-	-	-	-	-	-	+	+
Hepatocellular Carcinoma	-	-	-	-	-	-	-	-	-	+	-/+

CK, cytokeratin; CR, calretinin; CgA, chromogranin A; EMA, epithelial membranous antigen; NF, neurofilament; SYN, synaptophysin.

We strive to be complete and accurate in the presentation of this flyer however, we assume no liability for any reliance on any of the contents of this flyer including but not limited to the antibody grids. Furthermore, we assume no liability for any omissions. It is the sole responsibility of laboratories to independently validate the application. The antibody grids were constructed based on our internal investigations with the percentage of positivity represented as follows: "-" for 0-40%, "-/+" for 40-50%, "+/-" for 50-60%, "+" for 60-100%, and blank for no available data.



USA
Toll Free: 800.665.7284
Phone: 916.746.8900
Fax: 916.746.8900
Email: service@cellmarque.com
www.cellmarque.com

CANADA
Phone: +1 916.746.8900
Fax: +1 916.746.8900
Email: international@cellmarque.com
www.cellmarque.com

MilliporeSigma
400 Summit Drive
Burlington, MA 01803
www.sigmaaldrich.com

