

iFluor™ 594 Conjugated Anti-SOX2 Antibody [PO00-28] HA720180F



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse
Applications:	IF-Cell, FC
Molecular Wt:	Predicted band size: 34 kDa
Clone number:	PO00-28

Description: The differentiation of seminomas from non-seminomatous germ cell tumors can be challenging, especially, if small biopsy specimens, necrotic tumors and metastatic tumors with artifacts are encountered. A subset of germ cell tumors may require immunohistochemistry (IHC) for classification owing to unusual morphologic features, such as diffuse growth of clear cells, and tumors with glandular and/or microcytic patterns. In the mixed germ cell tumor, one component is often intermingled intimately with others such as embryonal carcinoma versus yolk sac tumor, can be overlooked. IHC will identify such an area and allow for the identification of each component of the mixed tumor more accurately and documenting them in the pathology report is recommended by WHO. Current IHC studies have shown the combination of CD30/CD117 staining plays a good role in distinguishing between embryonal carcinoma and yolk sac tumor. However, a subset of tumors may not be distinguished by this combination. Also, the characteristic membranous pattern by antibodies to CD30 and CD117 for the interpretation of the diagnosis may not be evident in limited biopsy specimens. In this respect, transcription factors, such as SOX-2, are easier to interpret due to their distinct nuclear reaction. SOX-2 has been reported as a diagnostic marker for embryonal carcinoma. SOX-2 was expressed in intratubular embryonal carcinoma, pure embryonal carcinoma and in the embryonal carcinoma component of mixed germ cell tumor in all cases. But, SOX-2 expression has not been found in seminoma, yolk sac tumor, and choriocarcinoma in almost all cases.

Conjugate:	iFluor™ 594, Ex: 588nm; Em: 604nm.
Immunogen:	Synthetic peptide within Human SOX2 aa 1-100 (N terminal).
Positive control:	F9 cell.
Subcellular location:	Nucleus.
Database links:	SwissProt: P48431 Human P48432 Mouse
Recommended Dilutions:	
IF-Cell	1:50
FC	1ug/mL
Storage Buffer:	Preservative: 0.02% Sodium azide Constituents: 30% Glycerol, 1% BSA, 68.98% PBS
Storage Instruction:	Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.
Purity:	Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders: 0086-571-88062880

Technical: 0086-571-89986345

Service mail: support@huabio.cn

华安生物
HUABIO
www.huabio.cn

Applications: WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

Images

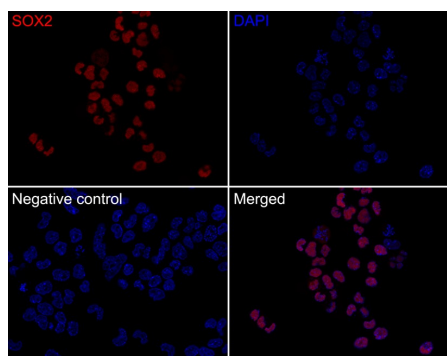


Fig1: Immunocytochemistry analysis of F9 cells labeling SOX2 with Rabbit anti-SOX2 antibody (HA720180F) at 1/50 dilution.

Cells were fixed in 100% methanol for 10 minutes, permeabilized with 0.1% Triton X-100 in PBS for 15 minutes, and then blocked with 1% BSA for 30 minutes at room temperature. Cells were then incubated with Rabbit anti-SOX2 antibody (HA720180F) at 1/50 dilution in 1% BSA overnight at 4 °C. Nuclear DNA was labelled in blue with DAPI.

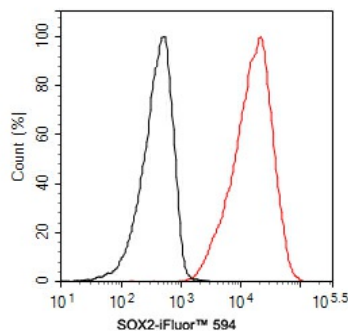


Fig2: Flow cytometric analysis of F9 cells labeling SOX2.

Cells were fixed and permeabilized. Then incubated for 1 hour at +4°C with SOX2 (HA720180F, red, 1ug/ml). Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Novak D. et. al. SOX2 in development and cancer biology. Semin Cancer Biol. 2020 Dec
2. Porter L. et. al. SOX2 and squamous cancers. Semin Cancer Biol. 2020 Dec

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物
HUABIO
www.huabio.cn

Applications:WB=Western blot IHC=Immunohistochemistry (paraffin) IF=Immunofluorescence (Cell) IF=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation