

SOX2 Monoclonal Antibody (Btjce), eFluor™ 570, eBioscience™

Product Details

Size	100 µg
Species Reactivity	Human, Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), eFluor™ 570, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	Btjce
Conjugate	eFluor™ 570
Excitation/Emission Max	556/569 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2573650

Applications	Tested Dilution	Publications
Western Blot (WB)	-	1 Publication
Immunohistochemistry (IHC)	Assay-Dependent	10 Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	-	2 Publications
Immunocytochemistry (ICC/IF)	5 µg/mL	13 Publications

Product Specific Information

Description: The Btjce monoclonal antibody reacts with the transcription factor Sox2, a member of the SOX (sex determining region Y -related HMG (High Mobility Group) Box) family of proteins. Sox family members play a role in early organ development, and in particular, Sox2 is essential for regulating genes that control normal mammalian embryogenesis. Sox2 and family member Sox3 are expressed as early as the preimplantation and epiblast stages respectively. Later expression is restricted to the neuroepithelium. Sox2 has been shown to be necessary for maintaining self-renewal and pluripotency of mouse and human embryonic stem (ES) cells (ESC). Oct4 (POU5F1), Klf4, c-myc, and Sox2 were the original four factors used to reprogram differentiated mouse and human cells to induced pluripotent stem cells (iPSC).

Expression of Sox2 is tightly regulated and recent studies have demonstrated that small changes in the levels of Sox2 in ES cells can trigger differentiation into multiple cell types. Sox2 expression is not limited to ES cells, it is also essential for early neurogenesis where its expression becomes restricted to the neural plate, and later to neural stem cells where it functions to suppress neural differentiation. Sox2 in combination with other stem cell markers can be used to characterize stem cell populations. Ectopic expression of Sox2 has been associated with multiple cancer types including colorectal and breast.

Applications Reported: This Btjce antibody has been reported for use in microscopy, immunohistochemical staining, and immunocytochemistry.

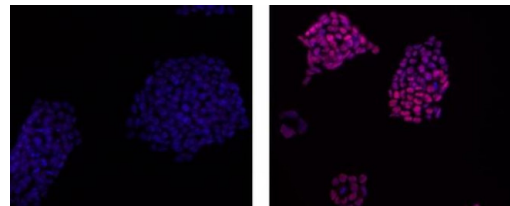
Applications Tested: This Btjce antibody has been tested by immunocytochemistry of fixed and permeabilized F9 cells. This can be used at less than 5 µg/mL. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Filter Recommendation: When using this eFluor® 570 antibody conjugate, we recommend a filter that will capture the 570 emission wavelength (for example, Excitation 545/25, 565LP, Emission 605/70). A standard Alexa Fluor® 555 or TRITC filter is acceptable.

Excitation: 555 nm; Emission: 570 nm

Bacterial expression of region after aa135 (homology between species but not to other family members)

Product Images For SOX2 Monoclonal Antibody (Btjce), eFluor™ 570, eBioscience™



SOX2 Antibody (41-9811-82) in ICC/IF
Immunocytochemistry of F9 cells using 5 µg/mL of Rat IgG2a Isotype Control eFluor® 570 (left) or 5 µg/mL of Anti-Human/Mouse Sox2 eFluor® 570 (right). Nuclei are stained with DAPI.

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Western Blot (1)

International journal of molecular sciences	Year 2022
Hedgehog Signaling Pathway Orchestrates Human Lung Branching Morphogenesis.	
"Published figure using SOX2 monoclonal antibody (Product # 41-9811-82) in Immunohistochemistry"	
Authors: Belgacemi R,Danopoulos S,Deutsch G,Glass I,Dormoy V,Bellusci S,Al Alam D	

Immunohistochemistry (10)

Developmental cell	Year 2022
DNGR-1-tracing marks an ependymal cell subset with damage-responsive neural stem cell potential.	
"Published figure using SOX2 monoclonal antibody (Product # 41-9811-82) in Immunohistochemistry"	
Authors: Frederico B,Martins I,Chapela D,Gasparrini F,Chakravarty P,Ackels T,Piot C,Almeida B,Carvalho J,Ciccarelli A, Peddie C,J,Rogers N,Briscoe J,Guillemot F,Schaefer AT,Saúde L,Reis e Sousa C	

International journal of molecular sciences	Year 2022
Hedgehog Signaling Pathway Orchestrates Human Lung Branching Morphogenesis.	
"Published figure using SOX2 monoclonal antibody (Product # 41-9811-82) in Immunohistochemistry"	
Authors: Belgacemi R,Danopoulos S,Deutsch G,Glass I,Dormoy V,Bellusci S,Al Alam D	

[View more IHC references on thermofisher.com](#)

Immunohistochemistry (Paraffin) (1)

Life (Basel, Switzerland)	Year 2020
Cancer Stem Cells in Head and Neck Metastatic Malignant Melanoma Express Components of the Renin-Angiotensin System.	
"Published figure using SOX2 monoclonal antibody (Product # 41-9811-82) in Immunohistochemistry (Paraffin)"	
Authors: Siljee S,Pilkington T,Brasch HD,Bockett N,Patel J,Paterson E,Davis PF,Tan ST	

More applications with references on thermofisher.com

- IHC (F) (2)
- ICC/IF (13)

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