

Mouse Anti-SOX2 [SOX2/1791]: MC0299, MC0299RTU7

Intended Use: For Research Use Only

Description: Anti-SOX2 recognizes lung squamous cell carcinoma (LSCC). Extensive anti-SOX2 staining is seen in over 90% of LSCC and largely parallels p63 expression. However, only 4.5% of lung adenocarcinoma (LACA) is positive for SOX2. In a study by Sholl et al, 29% of LACA cases exhibited at least focal p63 expression. Combined p63 and SOX-2 expression was seen in 94% of LSCC and 12% of LACA with a statistically significant difference ($P < 0.0001$) versus p63 alone. Anti-CK 5&6 had a good sensitivity but poor specificity for LSCC. Combined anti-CK 5&6 and anti-p63 positivity was seen in 93% of LSCC and 24% of LACA. Anti-CK 5&6+/anti-p63+/anti-SOX2+ was detected in 93% of LSCC and only 9% of LACA. These results indicate that the sensitivity of anti-p63 is equally high but its specificity is similarly variable; it was seen at least focally in close to 30% of LACA. When used together, anti-p63+/anti-SOX2+ applied to the same tumor cell population is >90% specific for LSCC. Anti-SOX2 produced moderate- to-intense staining in all 50 cases of embryonal carcinoma components with strong anti-SOX2 positivity and moderate-to- intense staining. The only other component that showed reactivity was the primitive neuroectodermal component in 11 of 14 (79%) of immature teratomas.

Specifications

Clone:	SOX2/1791
Source:	Mouse
Isotype:	IgG2b/k
Reactivity:	Human, mouse
Immunogen:	Recombinant fragment aa 176-305 of human SOX2 protein
Localization:	Nucleus
Formulation:	Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN ₃)
Storage:	Store at 2°- 8°C
Applications:	IHC, WB
Package:	

Description	Catalog No.	Size
SOX2 Concentrated	MC0299	1 ml
SOX2 Prediluted	MC0299RTU7	7 ml

IHC Procedure

Positive Control Tissue:	Squamous epithelium
Concentrated Dilution:	50-200
Pretreatment:	Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C
Incubation Time and Temp:	30-60 minutes @ RT
Detection:	Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human lung carcinoma stained with anti-SOX2 using DAB

References:

1. Antagonistic Functions of USAG-1 and RUNX2 during Tooth Development. Togo Y, et al. PLoS One 11:e0161067, 2016.
2. SOX2 promotes dedifferentiation and imparts stem cell-like features to pancreatic cancer cells. Herreros-Villanueva M, et al. Oncogenesis 2:e61, 2013.

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