

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

Intended Use: For Research Use Only

Description: Anti-SOX2 recognizes lung squamous cell carcinoma (LSCC). Extensive anti-SOX-2 staining is seen in over 90% of LSCC and largely parallels p63 expression. However, only 4.5% of lung adenocarcinoma (LACA) is positive for SOX-2. 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-SOX-2+ 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-SOX-2+ applied to the same tumor cell population is >90% specific for LSCC. Anti-SOX-2 produced moderate- to-intense staining in all 50 cases of embryonal carcinoma components with strong anti-SOX-2 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. In each of these positive staining foci, the staining varied from moderate-to-strong. Yolk sac tumor, seminoma, mature teratoma, choriocarcinoma, and IGCNU were uniformly negative, as were all the non-neoplastic parenchymal and stromal structures.

Specifications

Clone: SOX2/1791
 Source: Mouse
 Isotype: IgG2b/k
 Reactivity: Human, mouse
 Localization: Nucleus
 Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)
 Storage: Store at 2°- 8°C
 Applications: IHC, ELISA, 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: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using 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.

Doc. 100-MC0299
Rev. A