

Spotlight On:

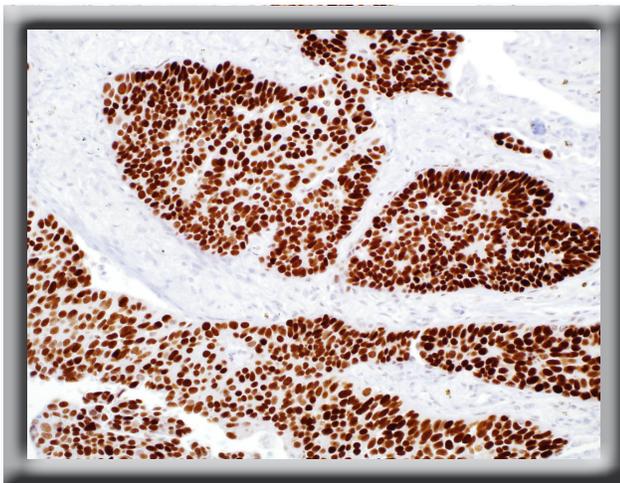
SOX-2 (SP76)

Lung cancer is the most common cause of cancer-related death in men and women, worldwide. Approximately 80% of all lung cancers are non-small cell lung carcinomas. Of that figure, about 30% are squamous cell lung carcinomas. Due to the side effects of certain therapies available for non-small cell lung carcinomas, it is essential for pathologists to distinguish squamous cell carcinomas of the lung from other non-small cell carcinomas of the lung, such as adenocarcinoma. Based on publication (J Thorac Oncol 2011;6:1190), SOX-2 is most specific nuclear marker for lung squamous cell carcinoma, superior to p63 (96% vs 52% for lung squamous cell carcinoma and 95% vs 48% for poorly differentiated lung squamous cell carcinoma). Increased positivity of p63 in lung adenocarcinomas, especially poorly differentiated, has decreased the value of p63 as a differentiator of lung squamous cell carcinoma and lung adenocarcinoma.

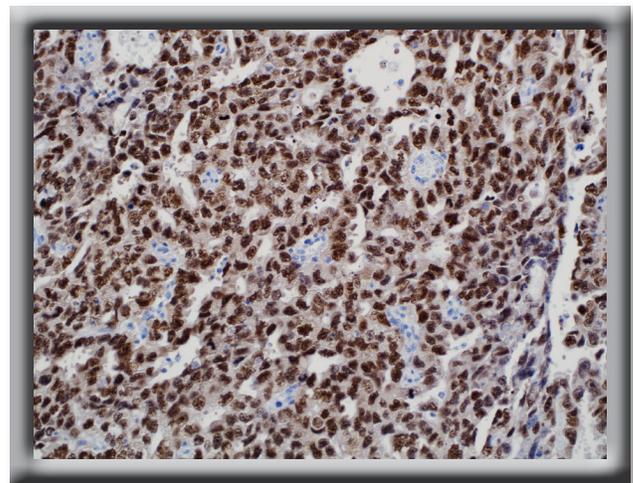
SOX-2 testing is also of value in germ cell tumor diagnostics. SOX-2 is diffusely positive in embryonal carcinomas, but negative in seminoma, yolk sac tumors, and choriocarcinomas. This suggests that anti-SOX-2 would be useful in a germ cell tumor panel with anti-placental alkaline phosphatase, anti-Oct-4, anti-alpha-fetoprotein, and anti-human chorionic gonadotropin (hCG).

Benefits of SOX-2:

- For *in vitro* diagnostic use.
- Applicable in dual stains with cytoplasmic squamous cell carcinoma markers such as CK 5 & 14 and/or Desmocollin-3.
- More accurate diagnosis of lung squamous cell carcinomas.
- Useful in differentiating squamous cell carcinomas from adenocarcinomas of various organ sites.
- Preferred nuclear marker for embryonal carcinomas.



Lung: SOX-2 stains nuclei of lung squamous cell carcinoma strongly and diffusely.



Embryonal: SOX-2 is immunoreactive in embryonal carcinoma.

Ordering Information

0.1 ml concentrated.....371R-14	1 ml concentrated371R-16	7 ml prediluted371R-18
0.5 ml concentrated.....371R-15	1 ml prediluted371R-17	5 Positive Control Slides...371S