

AM03173PU-N**Monoclonal Antibody to OCT3/4 - Purified**

Alternate names:	OCT3, OCT4, OTF3, Oct-3, Oct-4, Octamer-binding transcription factor 3, POU domain, POU5F1, class 5, transcription factor 1
Quantity:	1 ml
Background:	OCT-4 (also known as POU5F1), a transcription factor that has been recognized as fundamental in the maintenance of pluripotency in embryonic stem cells and primordial germ cells, has been proposed as a useful marker for Germ Cell Tumors (GCTs) that exhibit features of pluripotentiality, specifically seminoma / dysgerminoma / germinoma and embryonal carcinoma.
Uniprot ID:	Q01860
NCBI:	NP_002692.2
GenelD:	5460
Host / Isotype:	Mouse / IgG2b
Recommended Isotype Controls:	SM12P, AM03110PU-N
Clone:	NRG1.1
Immunogen:	BALB/C mice injected with synthetic peptide of Human OCT-4 origin.
Format:	State: Liquid purified IgG fraction Preservatives: ≤ 0.09% Sodium Azide
Applications:	Immunohistochemistry on Formalin fixed paraffin embedded tissue sections: 1/25-1/50 in an ABC method. Positive Control: Seminoma. Recommended pretreatment: Citrate Buffer pH 6.0 Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	OCT-4 immunostaining has been shown to be a sensitive and specific marker for seminomatous / (dys)germinomatous tumours and in embryonal carcinoma variants of non-seminomatous GCTs, whether in primary gonadal or extragonadal sites or in metastatic lesions. Cellular Localization: Nuclear.
Species Reactivity:	Tested: Human.
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
General Readings:	1. Cheng et al. J Pathol 211: 1, 2007. 2. Jung et al. Appl Immunohistochem Mol Morph 14: 273, 2006. 3. Sung et al. Human Pathol. Jun;37(6):662-7, 2006. 4. Jones et al. Am J Surg Pathol. Nov,30(11):1427-31, 2006. 5. Hattab et al. Am J Surg Pathol. 29(3):368-371, 2005.

6. Lau et al. Adv in Anat Path. 13(2):76-79, 2006.

Protocols:**Staining Protocol**

We suggest an incubation period of 30 minutes at room temperature. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the end user. Formalin fixed paraffin embedded tissue sections require high temperature antigen unmasking with 10 mM citrate buffer, pH 6.0 prior to immunostaining.

Pictures:

Formalin fixed paraffin embedded Testicular Seminoma stained with OCT4 antibody Cat.-No AM03173PU (Clone NRG1.1)

