

## Product datasheet for **TA327717**

### Oct4 (POU5F1) Mouse Monoclonal Antibody [Clone ID: MRQ-10]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	MRQ-10
Applications:	IHC
Recommended Dilution:	IHC: 1:50 - 1:200
Reactivity:	Human
Host:	Mouse
Isotype:	IgG
Clonality:	Monoclonal
Formulation:	This antibody is supplied as cell culture supernatant diluted in tris buffered saline, pH 7.3-7.7, with 1% BSA and <0.1% sodium azide.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	POU class 5 homeobox 1
Database Link:	<a href="#">NP_002692</a> <a href="#">Entrez Gene 5460 Human Q01860</a>
Synonyms:	Oct-3; Oct-4; OCT3; OCT4; OTF-3; OTF3; OTF4

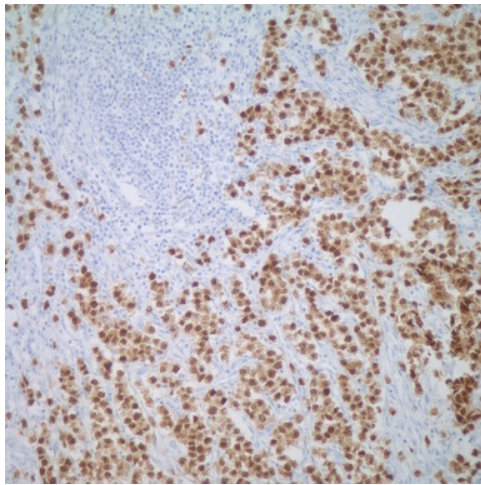


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**Note:** Oct-4 is a transcription factor that maintains and regulates pluripotency in embryonic stem and germ cells. Anti-Oct-4 has shown a very high sensitivity and specificity in seminoma/dysgerminoma, embryonal carcinoma, and the germ cell component of gonadoblastoma by nuclear immunostaining. Clear cell carcinoma may enter the differential diagnosis of dysgerminoma as both may grow in nests or tubules, contain clear cells, and have a prominent inflammatory infiltrate (lymphocytes in dysgerminoma and plasma cells in clear cell carcinoma). In one study that looked at anti-Oct-4 staining in clear cell carcinomas, 4 of 14 tumors were found to be focally positive. In another study, 49 endometrioid carcinomas were Oct-4 negative. Rarely dysgerminoma may have a morphologic appearance that overlaps with sex cord-stromal tumors, especially poorly differentiated Sertoli cell tumors. In two studies however, all sex cord-stromal tumors of the testis and granulosa cell tumors of the ovary were Oct-4 negative.

**Protein Families:** Adult stem cells, Cancer stem cells, Embryonic stem cells, Induced pluripotent stem cells, Stem cell - Pluripotency, Transcription Factors

**Product images:**



Immunohistochemistry staining of Paraffin Seminoma tissue by OCT-4 antibody (dilution: 1:50 - 1:200; visualization of staining: Nuclear)