



MOUSE ANTI-OCT-4 MONOCLONAL ANTIBODY

CATALOG NUMBER:	MAB4401-20UL	QUANTITY:	20 µL
LOT NUMBER:		CONCENTRATION:	1.0 mg/mL
ALTERNATE NAMES:	POU domain, class 5, transcription factor 1; Oct-3		
CLONE NAME:	10H11.2	HOST/ISOTYPE:	Ms IgG1

BACKGROUND: Octamer-4 (Oct-4), a member of the POU family of transcription factors, has been demonstrated to be vital for the formation of self-renewing pluripotent stem cells. During embryogenesis, expression of Oct-4 is limited to pluripotent cells of the inner cell mass (ICM) that contribute to the formation of all fetal cell types.

This relationship between Oct-4 and pluripotency has seen this transcription factor emerge as a marker of pluripotent stem cells. Undifferentiated human and murine pluripotent Embryonic Stem (ES) and Embryonic Carcinoma (EC) cells express Oct-4. Additionally, murine Embryonic Germ (EG) cells are also known to express Oct-4. Following stem cell differentiation, the level of Oct-4 expression decreases. Oct-4 expression by human EG cells is not known.

SPECIFICITY: Reacts with human Oct-4.

APPLICATIONS: Western blot: (MW 44 kDa)
Flow Cytometry
Immunocytochemistry
ELISA

Optimal working dilutions must be determined by the end user.

SPECIES REACTIVITY: Human. Reactivity with other species has not been determined.

IMMUNOGEN: Recombinant GST fusion protein, human Oct-4 (aa 1-134).

PRESENTATION: Purified Ascites presented as a liquid in PBS with 0.1% sodium azide.

STORAGE/HANDLING: Maintain refrigerated at 2-8°C in undiluted aliquots for up to 12 months.

REFERENCES: Pesce M. *et al.* (1998). *Bioessays* **20**:722-732
Nichols J. *et al.* (1998). *Cell* **95**:379-391
Donovan P. (2001). *Nature Genetics* **29**:246-247
Niwa H. *et al.* (2000). *Nature Genetics* **24**:372-376



Important Note: *During shipment, small volumes of product will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 μ L or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.*

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PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION

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