

## OCT-4 Monoclonal Antibody

### Description

<b>Product type</b>	Antibody
<b>Code</b>	BT-MCA4034
<b>Host</b>	Mouse
<b>Isotype</b>	Mouse IgG1
<b>Size</b>	100μL, 50μL
<b>Immunogen</b>	Purified recombinant fragment of Oct4 (aa193-360) expressed in E. Coli.
<b>Mol wt</b>	38.5kDa
<b>Species reactivity</b>	Human
<b>Clonality</b>	Monoclonal
<b>Recommended application</b>	Others
<b>Concentration</b>	N/A
<b>Full name</b>	N/A
<b>Synonyms</b>	OCT3;OTF3;OTF4;MGC22487;POU5F1

This product is for research use only, not for use in human, therapeutic or diagnostic procedure.

### Background

Oct4: octamer-binding transcription factor-4 (Oct-4, Otf-4) and Oct-3/4, also known as POU5F1(POU class 5 homeobox 1), octamerbinding transcription factor-3 (Oct-3, Otf-3), modulates embryonic stem (ES) cell populations by influencing lineage commitment. Entrez Protein NP\_002692. Oct-3/4 sustains stem-cell selfrenewal and differentiation pathways. Transcription factors containing the POU homeodomain regulate tissue-specific gene expression in lymphoid and pituitary differentiation and in early mammalian development. Oct-3/4 is capable of inducing rapid proliferation and tumorigenic properties of ES cells through activation of the UTF1 gene. In humans, two Oct-3/4 isoforms contribute to influencing the undifferentiated phenotype of ES cells. Oct-3/4 pseudogenes localizing to human chromosomes 10 and 8 are reported to be transcribed in certain cancer cell lines and tissues.

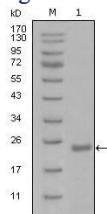
### Recommended Dilution

WB: 1:500 - 1:2000

ELISA: 1:10000

Not yet tested in other applications.

### Images



Western blot analysis using Oct4 mouse mAb against recombinant Oct4 protein with Trx tag (1).

### Storage

Store at 4°C short term. Aliquot and store at -20°C long term.