



Anti-POU5F1 monoclonal antibody, clone OSH1.2 (DMAB5535MH)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Mouse anti-human OCT-4 monoclonal antibody is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy. Clinical interpretation of staining results should be accompanied by histological studies with proper controls. Patients' clinical histories and other relevant diagnostic tests should be utilized by a qualified person(s) when evaluating and interpreting results.
Antigen Description	Oct-4 (octamer-binding transcription factor 4) also known as POU5F1 (POU domain, class 5, transcription factor 1) is a protein that in humans is encoded by the POU5F1 gene. Oct-4 is a homeodomain transcription factor of the POU family.
Specificity	OCT-4 (also known as POU5F1), is a transcription factor that has been recognized as fundamental in the maintenance of pluripotency in embryonic stem cells and primordial germ cells. It has been proposed as a useful marker for germ cell tumors (GCT) that exhibit features of pluripotentiality, (seminoma, dysgerminoma, germinoma and embryonal carcinoma). OCT-4 immunostaining has been shown to be a sensitive and specific marker for GCT, whether in primary gonadal, extragonadal sites, or metastatic lesions.
Immunogen	BALB/C mice injected with synthetic peptide of human OCT-4 origin.
Isotype	IgG2b
Source/Host	Mouse
Species Reactivity	Human
Clone	OSH1.2
Conjugate	Unconjugated

Applications	IHC
Cellular Localization	Nuclear
Positive Control	Seminoma
Format	This antibody is supplied as purified immunoglobulin fraction containing sodium azide as preservative.
Preservative	See individual product datasheet
Storage	Store at 2-8°C. Do not use beyond the expiration date stated on the label.

GENE INFORMATION

Gene Name	POU5F1 POU class 5 homeobox 1 [Homo sapiens]
Synonyms	POU5F1; POU class 5 homeobox 1; OCT3; OCT4; OTF3; OTF4; OTF-3; Oct-3; Oct-4; MGC22487; POU domain class 5, transcription factor 1; POU domain, class 5, transcription factor 1; Octamer-binding protein 3; Octamer-binding protein 4; Octamer-binding transcription factor 3; octamer-binding protein 3; octamer-binding protein 4; POU domain transcription factor OCT4; octamer-binding transcription factor 3; octamer-binding transcription factor-3; POU-type homeodomain-containing DNA-binding protein; OTTHUMP00000029292; OTTHUMP000000221150; OTTHUMP000000221151; OTTHUMP0000002396652
Entrez Gene ID	5460
Protein Refseq	NP_002692
UniProt ID	M1S623
Chromosome Location	6p21.31
Pathway	HIF-2-alpha transcription factor network; Wnt Signaling Pathway and Pluripotency
Function	DNA binding; miRNA binding; protein binding; sequence-specific DNA binding; sequence-specific DNA binding RNA polymerase II transcription factor activity; sequence-specific DNA binding transcription factor activity; transcription factor binding; transcrip