



Mouse Anti-Human 43377 monoclonal antibody, clone JID754 (CABT-L2859)

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

PRODUCT INFORMATION

Product Overview	This antibody is intended for qualified laboratories to qualitatively identify by light microscopy the presence of associated antigens in sections of formalin-fixed, paraffin-embedded tissue sections using IHC test methods.
Specificity	Human Oct-4
Isotype	IgG
Source/Host	Mouse
Species Reactivity	Human
Clone	JID754
Conjugate	Unconjugated
Applications	IHC
Reconstitution	The prediluted antibody does not require any mixing, dilution, reconstitution, or titration; the antibody is ready-to-use and optimized for staining. The concentrated antibody requires dilution in the optimized buffer, to the recommended working dilution range.
Positive Control	Seminoma
Format	Liquid
Size	Predilute: 7 ml, Concentrate: 100 µl, Concentrate: 1 ml
Buffer	Predilute: Antibody Diluent Buffer Concentrate: Tris Buffer, pH 7.3 - 7.7, with 1% BSA

Preservative	< 0.1% Sodium Azide
Storage	Store at 2-8°C. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction	Octamer-binding transcription factor 4 (Oct-4), also known as POU5F1 (POU domain, class 5, transcription factor 1), is a member of the POU homeodomain family of transcription factors and is involved in the maintenance and regulation of pluripotency in embryonic stem and germ cells. Anti-Oct-4 is highly useful and sensitive for seminomas, germinoma, dysgerminoma, embryonal carcinoma, and gonadoblastoma. Oct-4 may be associated with tumorigenesis, and can have an effect on some aspects of tumor behavior, including tumor recurrence or resistance to therapies.
Keywords	POU5F1;POU class 5 homeobox 1;OCT3;OCT4;OTF3;OTF4;OTF-3;Oct-3;Oct-4;POU domain, class 5, transcription factor 1

GENE INFORMATION

Gene Name	POU5F1 POU class 5 homeobox 1 [Homo sapiens (human)]
Official Symbol	POU5F1
Synonyms	POU5F1; POU class 5 homeobox 1; OCT3; OCT4; OTF3; OTF4; OTF-3; Oct-3; Oct-4; POU domain, class 5, transcription factor 1; octamer-binding protein 3; octamer-binding protein 4; POU domain transcription factor OCT4; octamer-binding transcription factor 3; POU-type homeodomain-containing DNA-binding protein;
Entrez Gene ID	5460
Protein Refseq	NP_001167002
UniProt ID	M1S623
Chromosome Location	6p21.31
Pathway	Cardiac Progenitor Differentiation; Developmental Biology; HIF-2-alpha transcription factor network; POU5F1 (OCT4), SOX2, NANOG activate genes related to proliferation; POU5F1 (OCT4), SOX2, NANOG repress genes related to differentiation; SIDS Susceptibility Pathways; Signaling pathways regulating pluripotency of stem cells; Transcriptional regulation of pluripotent stem cells;
Function	DNA binding; miRNA binding; poly(A) RNA 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;
transcription regulatory region DNA binding; ubiquitin protein ligase binding;
