

Datasheet for 600-401-DR5**POU5F1 Antibody****Overview**

Description:	Anti-POU5F1 (RABBIT) Antibody - 600-401-DR5
Item No.:	600-401-DR5
Size:	100 µg
Applications:	ELISA, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	POU5F1, also commonly known as Oct-4, is a maternally expressed octamer-binding protein that was the first transcription factor described for the early stages of development. The role of POU5F1 in embryonic development suggested that it might be useful in the creation of stem cells that might be useful in cell replacement therapies in the treatment of several degenerative diseases. Artificial stem cells, termed induced pluripotent stem (iPS) cells, can be created by expressing POU5F1 and the transcription factors Sox2, Klf4 and Lin28 along with c-Myc in mouse fibroblasts. More recently, experiments have demonstrated that iPS cells could be generated using expression plasmids expressing POU5F1, Sox2, Klf4 and c-Myc, eliminating the need for virus introduction, thereby addressing a safety concern for potential use of iPS cells in regenerative medicine.
Synonyms:	POU5F1 Antibody, OCT3, OCT4, OTF3, OTF4, OTF-3, Oct-3, Oct-4, OCT3, POU domain, class 5, transcription factor 1, Octamer-binding protein 3, 41915
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	POU5F1
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-POU5F1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 14 amino acid synthetic peptide near the C-terminus of human POU5F1.
Purity/Specificity:	Anti-POU5F1 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with POU5F1 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q01860 • GeneID - 5460 • NCBI - NP_002692

Application Details

Tested Applications:	ELISA, IHC, WB
Application Note:	Anti-POU5F1 Antibody has been tested for use in ELISA, Western Blotting, and Immunohistochemistry. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 39 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
IHC:	5 µg/mL
WB:	1 µg/mL

Formulation

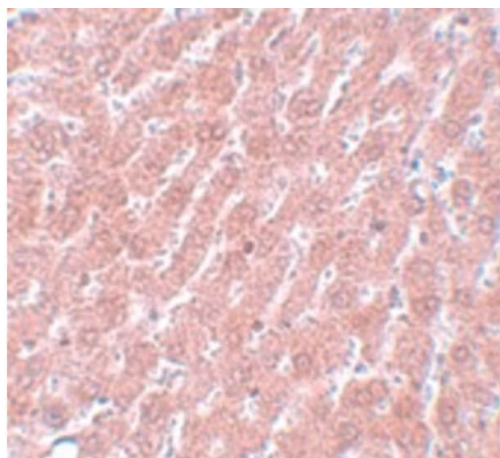
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

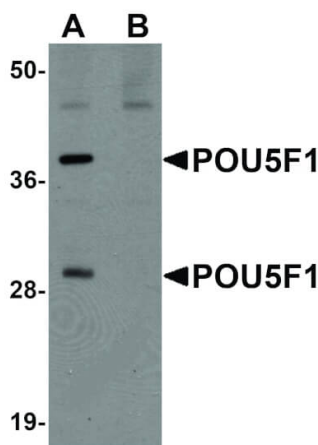
Expiration: Expiration date is one (1) year from date of receipt.

Images



Immunohistochemistry

Immunohistochemistry of POU5F1 antibody. Tissue: rat liver tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: POU5F1 antibody at 5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: POU5F1 is a nuclear and cytoplasmic. Staining: POU5F1 as precipitated pink signal with blue nuclear counterstain.



Western Blot

Western Blot of POU5F1 antibody. Lane 1: mouse liver tissue lysate in the absence of blocking peptide. Lane 2: mouse liver tissue lysate in the presence of blocking peptide. Primary Antibody: with POU5F1 antibody at 1 µg/mL. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 39 kDa, 39 kDa for POU5F1. Other band(s): POU5F1 splice variants and isoforms.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.