



Anti-Pou5f1 Monoclonal antibody, clone FN03 [Alexa Fluor® 488] (CABT-BL8196)

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

PRODUCT INFORMATION

Isotype	IgG2a, κ
Source/Host	Rat
Species Reactivity	Human, Mouse
Clone	FN03
Purification	Affinity chromatography
Conjugate	Alexa Fluor 488
Applications	FC, ICC
Format	Liquid
Concentration	0.5 mg/mL
Size	100 µg
Buffer	PBS, pH 7.2, with 0.1% gelatin
Preservative	0.09% Sodium Azide
Storage	4°C, store in dark, DO NOT FREEZE!

BACKGROUND

Introduction	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
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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.

Keywords

POU5F1; POU domain, class 5, transcription factor 1; octamer-binding protein 3; octamer-binding protein 4; octamer-binding transcription factor 3; Oct3; Oct4; Otf3; Otf4; NF-A3; Oct-3; Oct-4; Otf-3; Otf-4; Otf3g; Oct3/4; Oct-3/4; Otf3-rs7;

GENE INFORMATION

Entrez Gene ID

[5460](#)

UniProt ID

[Q01860](#)
