



# Anti-Pou5f1 Monoclonal antibody, clone FN03 [PE] (CABT-BL8194)

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

## PRODUCT INFORMATION

| Isotype            | lgG2a, к                           |
|--------------------|------------------------------------|
| Source/Host        | Rat                                |
| Species Reactivity | Human, Mouse                       |
| Clone              | FN03                               |
| Purification       | Affinity chromatography            |
| Conjugate          | PE                                 |
| Applications       | FC                                 |
| Format             | Liquid                             |
| Concentration      | 0.2 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, KlfF4 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 <u>5460</u>

UniProt ID Q01860