

Eff. Date: 4 March 2020 Version: 2.0 IFU: Oct 3-4 ILM527919

# Oct-3/4 clone C-10

# Instructions for Use

## Specification:

Transcription factors containing the POU homeo domain have been shown to be important regulators of tissue-specific gene expression in lymphoid and pituitary differentiation and in early mammalian development. POU domain proteins contain a bipartite DNA-binding domain divided by a flexible linker that enables them to adopt various monomer configurations on DNA. The versatility of POU protein operation is additionally conferred at the dimerization level. Oct-3 (also known as Oct-4) is a mammalian POU transcription factor expressed by early embryo cells and germ cells. Oct-3/4 is essential for the identity of the pluripotential founder cell population in the mammalian embryo. A critical amount of Oct-3/4 is required to sustain stem-cell self renewal, and up or down regulation induce divergent developmental programs. Two isoforms of Oct-3, termed Oct-3A and Oct-3B, are generated by alternative splicing. The gene which encodes Oct-3/4 maps to human chromosome 6p21.3. Oct-3/4 (C-10) is recommended for detection of Oct-3A (Oct-4) and Oct-3B of mouse, rat and human origin by Western Blotting, immunoprecipitation, immunofluorescence, and paraffin immunohistochemistry.

## Availability:

| Catalog No.   | Contents | Volume             |
|---------------|----------|--------------------|
| ILM527919-C01 | Oct-3/4  | 0,1 ml concentrate |
| ILM527919-C05 | Oct-3/4  | 0,5 ml concentrate |
| ILM527919-C1  | Oct-3/4  | 1,0 ml concentrate |

Intended use: For Research Use Only

Reactivity: Human

Clone: C-10

Species of origin: Mouse

Isotype: IgG2b

Control Tissue: Seminoma or embryonal carcinoma

Staining: Nuclear

Immunogen: Amino acids1-134 of Oct-3/4 of human origin

Presentation: Purified antibody in 0.2 % BSA and 15mM sodium azide

#### Application and suggested dilutions:

Pre-treatment: Heat induced epitope retrieval in 10 mM citrate buffer, pH6.0, or in 50 mM Tris buffer pH9.5, for 20 minutes is required for IHC staining on formalin-fixed, paraffin embedded tissue sections.

- Immunohistochemical staining of cryostat tissue sections (dilution up to 1:50-1:100)
- Immunohistochemical staining of formalin-fixed, paraffin embedded tissue section (dilution up to 1:50-1:100)

The optimal dilution for a specific application should be determined by the investigator.

**Note:** Dilution of the antibody in 10% normal goat serum followed by a goat anti-mouse secondary antibody-based detection is recommended.

Storage & Stability: Store at 2-8 °C do not freeze. Do not use after expiration date printed on the vial.

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#### References:

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