

Code No. 10431

## Anti-SSEA-3(15B11) Mouse IgG MoAb

Volume : 100 µg

Lot No. :

## Introduction

SSEA-3 (stage specific embryonic antigen 3), one of the sphingoglycolipid species, is expressed on the surface of the Muse (Multilineage-differentiating Stress Enduring) cells as well as human EC (Embryonic carcinoma) cells, ES (Embryonic stem) cells and iPS (induced pluripotent stem) and has been used as a pluripotent/embryonic marker.

Muse cells are naturally existing pluripotent stem cells which repair the structure and function of damaged organs by selectively migrating and integrating to damaged tissue and spontaneously differentiating into tissue compatible cells. They can be isolated from mesenchymal tissue sources or cultured mesenchymal cells as double positive cells of CD105, a mesenchymal marker, and SSEA-3.

Anti-SSEA-3 (15B11) Mouse IgG MoAb is a world's first IgG subclass (IgG2b) monoclonal antibody that specifically detects SSEA-3.

Antigen : SSEA-3

Source : Mouse-Mouse hybridoma

(X63-Ag8.653×BDF-1 mouse cells)

Clone : 15B11 Subclass :  $IgG_{2b}$ 

Purification : Purified with Protein A

Form : Lyophilized product from 1% BSA in PBS containing 0.05% NaN<sub>3</sub>

**How to use** : 1.0 mL deionized water will be added to the product, then its concentration comes to

100 µg/mL

**Stability**: Lyophilized product, 5 years at 2 – 8 °C

: Solution, 2 years at -20 °C

Application : This antibody can be used for FACS analysis in concentration of 2.5~5.0 μg/mL

: This antibody can be stained in formalin fixed paraffin-embedded tissues.

The optimal dilution is 5  $\mu g/mL$ , however, the dilution rate should be optimized by

each laboratories.

**Specificity**: Reacts with human and mouse SSEA-3.

Less than 0.4% cross-reactivity to SSEA-4 and SSEA-3b.

**Reference**: 1. Kuroda et al., Unique multipotent cells in adult human mesenchymal cell populations.Proc Natl Acad Sci U S A. 2010 May 11;107(19):8639-43.

2. Wakao et al., Multilineage-differentiating stress-enduring (Muse) cells are a primary source of induced pluripotent stem cells in human fibroblasts. Proc Natl

Acad Sci U S A. 2011 Jun 14;108(24):9875-80.

3. Kuroda et al., Isolation, culture and evaluation of multilineage-differentiating

stress-enduring (Muse) cells. Nat Protoc. 2013;8(7):1391-415.