

Product Information

Monoclonal Anti-LEF-1 (β-Catenin Binding Domain) Clone REMB1

produced in mouse, purified immunoglobulin

Catalog Number **L4020**

Product Description

Monoclonal Anti-LEF-1 (β-Catenin Binding Domain) (mouse IgG1 isotype) is derived from the REMB1 hybridoma produced by the fusion of mouse myeloma cells and splenocytes from a mouse immunized with full length recombinant LEF-1. The antibody is purified from ascites fluid using Protein G chromatography.

Monoclonal Anti-LEF-1 (β-Catenin Binding Domain) recognizes the β-Catenin Binding Domain of human LEF-1 using immunoblotting (55–57 kDa). The antibody may be used for immunoblotting or immunofluorescence. The antibody does not cross-react with TCF-1 or TCF-4.

Lymphoid enhancer factor, LEF-1, is a transcription factor of the High Mobility Group of DNA binding proteins. It is one member of a family of four proteins referred to as LEF/TCF transcription factors (LEF-1, TCF-1, TCF-3, and TCF-4). These factors play crucial roles in WNT/Wingless signaling, a signal transduction cascade that directs cell differentiation. Aberrant activation of the WNT/Wingless pathway is also a root cause in the genesis of certain cancers such as colon cancer, melanoma, and breast cancer.

LEF-1 is expressed during development in many different differentiating tissues and in a few tissues after birth. LEF-1 expression is required for proper development of breast, teeth, hair, whiskers, and the trigeminal nerve. It is redundant with TCF-1 (for T cell Factor-1) for correct development of T lymphocytes in the thymus. LEF-1 is a 399 amino acid protein. Alternative splice forms of LEF-1 and other LEF/TCF family members have been identified, but the expression pattern and relative abundance of these alternative forms have not been well studied. They can appear on immunoblots as small immunoreactive forms.

Reagent

Monoclonal Anti-LEF-1 (β-Catenin Binding Domain) is supplied as a solution in phosphate buffered saline containing 0.08% sodium azide.

Protein Concentration: ~1 mg/mL

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2–8 °C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing is not recommended. Storage in “frost-free” freezers is also not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working antibody concentration of 1–5 μg/mL is recommended using whole extracts of human Jurkat cells or transiently expressed human LEF-1 in whole cell lysates from Cos-1 cells.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.

References

1. Eastman, Q., and Grosschedl, R., Regulation of LEF-1/TCF transcription factors by Wnt and other signals. *Curr. Opin. Cell. Biol.*, **11**, 233-240 (1999).

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