



## PRODUCT DATA SHEET

**Product:** Anti-LEF-1, Clone REMB1

**Cat. No.:** MC-866 (250 µg)

**Background:**

Lymphoid Enhancer Factor - 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 a crucial role 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 (T Cell Factor-1) for correct development of T lymphocytes in the thymus. LEF-1 is a 399 amino acid protein that appears as a cluster of polypeptides ranging in size between 55-57 kDa in SDS-PAGE analysis. 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 may appear on Western blots as smaller immunoreactive forms.

**Specificity:**

Antibody recognizes the  $\beta$ -catenin binding domain of LEF-1. Does not cross-react with TCF-1 or TCF-4.

**Species Reactivity:**

Human. Other species not tested.

**Ig Isotype:**

Mouse IgG<sub>1</sub>

**Immunogen:**

Full length human LEF-1

**Format:**

250 µg IgG purified from ascites, provided as 0.2 µm sterile filtered solution at 1 mg/ml in PBS with 0.08% sodium azide.

**Storage:**

Store at -20°C. Aliquot to avoid freeze/thaw cycles.

**Applications and Suggested Dilutions:**

- Immunofluorescence
- Western blot: Use at 1-5 µg/ml

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

**Limitations:**

For *in vitro* research use only. Not for use in diagnostics or in humans.

**Warranty:**

No warranties, expressed or implied, are made regarding the use of this product. KAMIYA BIOMEDICAL COMPANY is not liable for any damage, personal injury, or economic loss caused by this product.