



**Description:** This peptide is used to block LEF1 (C12A5) Rabbit mAb #2230 reactivity in peptide dot blot protocols.

**Background:** LEF1 and TCF are members of the high mobility group (HMG) DNA binding protein family of transcription factors that consists of the following: Lymphoid Enhancer Factor 1 (LEF1), T Cell Factor 1 (TCF1), TCF3, and TCF4 (1). LEF1 and TCF1 were originally identified as important factors regulating early lymphoid development (2) and act downstream in Wnt signaling. LEF1 and TCF bind to Wnt response elements to provide docking sites for  $\beta$ -catenin, which translocates to the nucleus to promote the transcription of target genes upon activation of Wnt signaling (3). LEF1 and TCF are dynamically expressed during development and aberrant activation of the Wnt signaling pathway is involved in many types of cancers including colon cancer (4,5).

**Quality Control:** The quality of the peptide was evaluated by reversed-phase HPLC and by mass spectrometry. The peptide blocks LEF1 (C12A5) Rabbit mAb #2230 by peptide dot blot.

**Directions for Use:** Use as a blocking reagent to evaluate the specificity of antibody reactivity in peptide dot blot protocols. Recommended antibody dilutions can be found on the relevant product data sheet.

## **Background References:**

- (1) Waterman, M.L. (2004) *Cancer Metastasis Rev.* 23, 41–52.
- (2) Schilham, M.W. and Clevers, H. (1998) Semin. Immunol. 10, 127–132.
- (3) Brantjes, H. et al. (2002) Biol. Chem. 383, 255-261.
- (4) Reya, T. and Clevers, H. (2005) Nature 434, 843-850.
- (5) Logan, C.Y. and Nusse, R. (2004) *Annu. Rev. Cell Dev. Biol.* 20, 781–810.

**Storage:** Supplied in 20 mM potassium phosphate (pH 7.0), 50 mM NaCl, 0.1 mM EDTA, 1 mg/ml BSA and 5% glycerol. 1% DMSO. Store at -20°C.

## **Companion Products:**

LEF1 (C12A5) Rabbit mAb #2230