BRF1/2 Antibody

Background: Butyrate response factor 1 (BRF1; also known as EGF response factor 1 [ERF1], TIS11B, ZFP36L1) and butyrate response factor 2 (BRF2; also known as EGF response factor 2 [ERF2], TIS11D, ZFP36L2) both belong to the TIS11 family of CCCH zinc-finger proteins (1). This family of proteins, which also includes tristetraprolin (TTP), bind to AU-rich elements (ARE) found in the 3'-untranslated regions of mRNAs and promote de-adenylation and rapid degradation by the exosome (2,3). These proteins play a critical role in cell growth control by regulating the mRNA turnover of multiple cytokines, growth factors and cell cycle regulators, including GM-CSF, TNFα, IL-2, IL-3 and IL-6 (4,5). Deregulated ARE-mRNA stability can contribute to both inflammation and oncogenic transformation (6–8). Insulin-induced stabilization of ARE-containing transcripts is mediated by Akt/PKB phosphorylation of BRF1 at Ser92, which results in binding by 14-3-3 protein and inactivation of BRF1 (9).

Specificity/Sensitivity: This antibody detects endogenous levels of total BRF1 and BRF2 proteins. 

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the carboxy terminus of human BRF1 protein. Antibodies are purified by protein A and peptide affinity chromatography.

Western blot analysis of cell lysates from HT1080, HT1080 BRF1-/-, HCT15, C6, COS and NIH/3T3 cells, using BRF1/2 Antibody.