

DB108: AP-2αβ (A6/2/2)

Background:

The AP-2 transcription factor exists in three isoforms, α , β , and γ that have proven to be essential for gene expression associated with ectodermal development (1,2). The AP-2 isoforms have also been shown to compose the OB2-1 transcription factor (3,4). OB2-1 has been shown to upregulate c-erbB-2 (Neu), which is overexpressed in 25-30% of breast cancers through increased transcription and amplification of the gene (3). All three AP-2 isoforms are capable of binding to the c-erbB-2 promoter as homo or heterodimers (3). One study has found that AP-2 α and AP-2 γ are expressed at elevated levels in the majority of c-erbB-2 overexpressing mammary tumor lines they examined (3).

Origin:

AP- $2\alpha\beta$ (A6/2/2) is provided as a mouse monoclonal IgG₁ derived from a mouse immunized with a carboxy terminal peptide from AP- 2α .

Product Details:

Each vial contains 100 μ g/ml of mouse monoclonal IgG₁ AP-2 $\alpha\beta$ (A6/2/2) DB108, in 1 ml PBS containing 0.1 % sodium azide and 0.2% gelatin.

Specificity:

 $AP-2\alpha\beta$ (A6/2/2) DB108 reacts with AP-2 α and AP-2 β of human origin by Western blotting, ELISA, immunoprecipitation and Immunohistochemistry (including paraffin-embedded tissue sections) and FACS. Western blotting starting dilution: 1:200.

Storage:

Store this product at 4° C, do not freeze. The product is stable for one year from the date of shipment.

References:

- 1. Oyama N, Takahashi H, Tojo M, Iwatsuki K, Iizuka H, Nakamura K, Homma Y, Kaneko F. 2002. Different properties of three isoforms (alpha, beta, and gamma) of transcription factor AP-2 in the expression of human keratinocytes. Arch Dermatol Res. 294(6):273-280.
- 2. Hilger-Eversheim K, Moser M, Schorle H, Buettner R. 2000. Regulatory roles of AP-2 transcription factors in vertebrate development, apoptosis and cell cycle control. Gene 260(1-2):1-12.
- 3. Bosher JM, Totty NF, Hsuan JJ, Williams T, Hurst HC. 1996. A family of AP-2 proteins regulates c-erbB-2 expression in mammary carcinoma. Oncogene 13(8): 1701-1707.
- 4. Bosher JM, Williams T, Hurst HC. 1995. The developmentally regulated transcription factor AP-2 is involved in c-erbB-2 overexpression in human mammary carcinoma. Proc Natl Acad Sci USA 92(3): 744-747.