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## JDP2 Antibody Blocking Peptide

**Catalog Number:** bs-17200P

**Activity:** Not tested

**Purification:** HPLC

**Storage:** Shipped at 4°C. Stored at -20°C for one year. Avoid repeated freeze/thaw cycles.

**Background:** c-Jun dimerization protein (JDP) 2 binds cAMP-response element (CRE) as a homodimer or as a heterodimer with ATF-2 and c-Jun. This dimerization allows JDP2 to repress CRE-dependent transcription. JDP2 is phosphorylated by c-Jun N-terminal kinase at Thr 138. JDP2 contains a basic leucine zipper (bZIP) region for DNA-binding. The bZIP region of JDP2 interacts with the DNA binding domain (DBD) of progesterone receptor (PR) in mammalian cells. Two other coactivators, creb binding protein (CBP) and p300 CBP-associated factor (PCAF), also associate with JDP2. Thus, JDP2 appears to stimulate the N-terminal activation function domain of PR by docking to the DBD and facilitation PR interaction with other coactivators. The expression of JDP2 in PR-targeted tissues and cells supports the role for JDP2 in PR function. In addition, JDP2 may play an important role in controlling the commitment of F9 embryonal carcinoma cells to differentiation. In undifferentiated F9 cells, JDP2 recruits HDAC3 and binds the differentiation response element within the c-jun promoter. Retinoic acid-induction replaces the JDP2/HDAC3 complex with PCAF and subsequently allows the transcription of c-Jun for F9 differentiation. The gene encoding human JDP2 maps to chromosome 14q24.2.