



RFXAP (m): 293T Lysate: sc-123094

BACKGROUND

The regulatory factor X (RFX) proteins include RFX1-5, RFX-B/Ank, and RFX-associated protein (RFXAP). RFX proteins are essential class II transcription factors and activate the enhancer elements of several hepatitis β virus genes as well as promote the induction of MHC class II genes in response to interferon- γ stimulation. Structural characteristics of the RFX family include a centrally located DNA-binding domain (DBD) and a C-terminal D region that facilitates dimerization. RFX5, RFX-B/Ank, and RFX-associated protein (RFXAP) comprise the RFX trimer, which binds to X and S boxes in major histocompatibility complex class II (MHC II) promoters. Even though RFXAP lacks a DNA-binding domain, RFXAP and RFX-B/Ank are essential to the RFX DNA-binding function. The RFXAP interacts specifically with RFX5. Loss of RFXAP function is linked to MHC II deficiency disease class D. The gene encoding human RFXAP maps to chromosome 13q13.3.

REFERENCES

1. Katan, Y., et al. 1997. The transcriptional activation and repression domains of RFX1, a context-dependent regulator, can mutually neutralize their activities. *Nucleic Acids Res.* 25: 3621-3628.
2. Durand, B., et al. 1997. RFXAP, a novel subunit of the RFX DNA binding complex is mutated in MHC class II deficiency. *EMBO J.* 16: 1045-1055.
3. Masternak, K., et al. 1998. A gene encoding a novel RFX-associated trans-activator is mutated in the majority of MHC class II deficiency patients. *Nat. Genet.* 20: 273-277.
4. Gajiwala, K.S., et al. 2000. Structure of the winged-helix protein hRFX1 reveals a new mode of DNA binding. *Nature* 403: 916-921.
5. Nekrep, N., et al. 2000. Mutations in the bare lymphocyte syndrome define critical steps in the assembly of the regulatory factor X complex. *Mol. Cell. Biol.* 20: 4455-4461.
6. LocusLink Report (LocusID: 5994) <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: Rfxap (mouse) mapping to 3 C.

PRODUCT

RFXAP (m): 293T Lysate represents a lysate of mouse RFXAP transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

RFXAP (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive RFXAP antibodies. Recommended use: 10-20 μ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.