**BACKGROUND**

Egr-1, Egr-2, Egr-3 and Egr-4 are nuclear transcription factors belonging to the Egr-C2H2-type zinc-finger protein family and containing three C2H2-type zinc fingers. As immediate early proteins, Egr transcription factors are rapidly induced by diverse extracellular stimuli. They are subject to tight differential control through diverse mechanisms at several levels of regulation: transcriptional, translational and posttranslational (including glycosylation, phosphorylation and redox mechanisms); and protein-protein interaction. Egr-1 binds to the DNA sequence 5'-CGCCCGCGC-3' (Egr-site), thereby activating transcription of target genes whose products are required for mitogenesis and differentiation. Egr-2 binds specific DNA sites located in the promoter region of HoxA4. Egr-2 defects cause congenital hypomyelination neuropathy (also designated Charcot-Marie-Tooth disease) and Dejerine-Sottas neuropathology (also designated hereditary motor and sensory neuropathy III). Egr-3 is involved in muscle spindle development and is expressed in T cells 20 minutes following activation. Egr-4 binds to the Egr consensus motif CCGTGGGCG, functions as a transcriptional repressor, and displays autoregulatory activity.

**CHROMOSOMAL LOCATION**

Genetic locus: EGR1 (human) mapping to 5q31.2; Egr1 (mouse) mapping to 18 B1.

**SOURCE**

Egr-1 (B-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 524-543 at the C-terminus of Egr-1 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG kappa light chain in 1 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-515830 X, 200 µg/ml. Egr-1 (B-6) is available conjugated to agarose (sc-515830 AC), 500 µg/0.25 ml.

**DATA**

*Egr-1 (B-6)* HRP: sc-515830 HRP. Direct western blot analysis of *Egr-1* expression in A-431 (A), HeLa (B), COLO 320DM (C), HL-60 (D) and SW480 (E) nuclear extracts and NTERA-2 cl.D1 whole cell lysate (F).

**SELECT PRODUCT CITATIONS**


**PROTOCOLS**

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