# EBF4 (G-17): sc-102507



The Power to Question

#### **BACKGROUND**

B lymphocyte maturation is an intricate process that requires a distinct set of transcription factors with respect to the stage of cell differentiation and cell lineage. Among the transcriptional regulators involved in the early stages of B cell development, EBF4 (early B-cell factor 4), also known as transcription factor COE4, is a 602 amino acid nuclear protein that binds the Olf1 site, the consensus sequence 5'-ATTCCCNNGGGAATT-3'. Like other members of the Olf-1/EBF (O/E) family of transcription factors, EBF4 may play an important role in B cell maturation and neural development. There are two isoforms of EBF4 that exist as a result of alternative splicing events. In regards to transcriptional activation of a reporter construct, all EBF4 isoforms are weaker than EBF, EBF2 and EBF3. By interacting with other O/E family members, EBF4 most likely forms homodimers or heterodimers to regulate gene expression.

# **REFERENCES**

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# CHROMOSOMAL LOCATION

Genetic locus: EBF4 (human) mapping to 20p13.

#### **SOURCE**

EBF4 (G-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of EBF4 of human origin.

#### **RESEARCH USE**

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

#### **PRODUCT**

Each vial contains 100  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-102507 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

EBF4 (G-17) is recommended for detection of EBF4 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with family member EBF.

Suitable for use as control antibody for EBF4 siRNA (h): sc-77217, EBF4 shRNA Plasmid (h): sc-77217-SH and EBF4 shRNA (h) Lentiviral Particles: sc-77217-V.

Molecular Weight of EBF4: 64 kDa.

## **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

# **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## **PROTOCOLS**

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

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