

## EBF1 (S-22): sc-133527

### BACKGROUND

The mammalian olfactory system is composed of special sensory neurons within the olfactory epithelium. Mature sensory neurons express several olfactory-specific genes, many of which produce gene products essential to the odorant signal transduction cascade. Early B cell factor 1 (EBF1), also known as COLLIER/OLF1/EBF transcription factor 1 (COE1) or olfactory neuronal transcription factor 1 (OLF1), is a 591 amino acid protein belonging to the COE family. EBF1 has been identified as an olfactory-specific factor, which binds to olfactory-specific genes and coordinates their expression. EBF1 is also a tissue-specific and differentiation stage-specific factor that is involved in the development of B cells. Localized to the nucleus, EBF1 forms a homodimer or a heterodimer with a related family member. Activity of EBF1 can be blocked by interaction with ZNF423 and ZNF521, which prevent binding of EBF1 to DNA. EBF1 is expressed as two isoforms produced by alternative splicing.

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### CHROMOSOMAL LOCATION

Genetic locus: EBF1 (human) mapping to 5q33.3; Ebf1 (mouse) mapping to 11 B1.1.

### SOURCE

EBF1 (S-22) is an affinity purified rabbit polyclonal antibody raised against synthetic EBF1 peptide of human origin.

### PRODUCT

Each vial contains 50  $\mu$ g IgG in 500  $\mu$ l PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

### APPLICATIONS

EBF1 (S-22) is recommended for detection of EBF1 of mouse, rat, human, *Drosophila melanogaster* and *Caenorhabditis elegans* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for EBF1 siRNA (h): sc-106965, EBF1 siRNA (m): sc-143277, EBF1 shRNA Plasmid (h): sc-106965-SH, EBF1 shRNA Plasmid (m): sc-143277-SH, EBF1 shRNA (h) Lentiviral Particles: sc-106965-V and EBF1 shRNA (m) Lentiviral Particles: sc-143277-V.

Molecular Weight of EBF1 isoforms: 64/61 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

### STORAGE

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

### RESEARCH USE

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

### PROTOCOLS

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Try **EBF (C-8): sc-137065** or **EBF (D-8): sc-137039**, our highly recommended monoclonal alternatives to EBF1 (S-22). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **EBF (C-8): sc-137065**.