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# EBF1 (h4): 293T Lysate: sc-177162

## 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.

## REFERENCES

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## 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.

## CHROMOSOMAL LOCATION

Genetic locus: EBF1 (human) mapping to 5q33.3.

## PRODUCT

EBF1 (h4): 293T Lysate represents a lysate of human EBF1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## APPLICATIONS

EBF1 (h4): 293T Lysate is suitable as a Western Blotting positive control for human reactive EBF1 antibodies. Recommended use: 10-20 µl per lane.

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

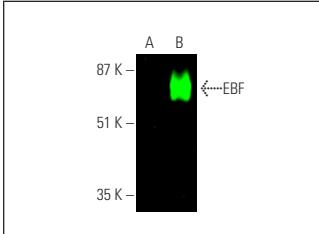
EBF (C-8): sc-137065 is recommended as a positive control antibody for Western Blot analysis of enhanced human EBF1 expression in EBF1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## RECOMMENDED SUPPORT REAGENTS

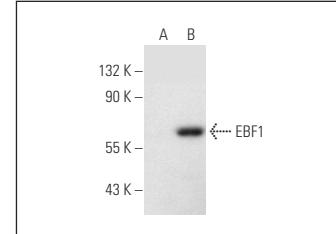
To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## DATA



EBF (C-8): sc-137065. Near-infrared western blot analysis of EBF expression in non-transfected: sc-117752 (**A**) and human EBF1 transfected: sc-177162 (**B**) 293T whole cell lysates. Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-IgG $\kappa$  BP-CFL 680.



EBF (H-6): sc-398173. Western blot analysis of EBF expression in non-transfected: sc-117752 (**A**) and human EBF1 transfected: sc-177162 (**B**) 293T whole cell lysates. Detection reagent used: m-IgG $\kappa$  BP-CFL 680.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.