BACKGROUND
Epstein-Barr virus-induced gene 3 (Ebi3) is a widely expressed homolog to the interleukin IL-12 p40 subunit protein that forms a heterodimer with either IL-12 p35 or an IL-12 p35 homolog, p28, to create a new cytokine (IL-27). IL-27 is an early product of activated antigen-presenting cells and drives rapid clonal expansion of naive but not memory CD4+ T cells. Interferon-β differentially regulates expression of the IL-12 family members p35, p40, p19 and Ebi3 in activated human dendritic cells. Ebi3 may function to antagonize IL-12 and to inhibit the development of a Th1 immune response. Ebi3 is strongly expressed in Hodgkin and Reed-Sternberg cells, independently of the EBV status of the tumor cells. Research suggests that Ebi3 may be an additional component of the repertoire employed by Hodgkin and Reed-Sternberg cells to inhibit an effective anti-tumor or anti-viral immune response. The human Ebi3 gene maps to chromosome 19p13.3 and encodes a secreted glycoprotein that is expressed in spleen and tonsils, and at high levels in full-term placenta.

APPLICATIONS
Ebi3 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Ebi3 antibody. 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.

Ebi3 (M-75): sc-32869 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Ebi3 expression in Ebi3 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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.

REFERENCES

CHROMOSOMAL LOCATION
Genetic locus: Ebi3 (mouse) mapping to 17 C.

PRODUCT
Ebi3 (m): 293T Lysate represents a lysate of mouse Ebi3 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

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