

# BASE (Q-15): sc-85291

## BACKGROUND

The PLUNC family of proteins are encoded by genes which map to chromosome 20 and are thought to play a potential role in the innate immune response in regions of the mouth, nose and lungs. As a member of the PLUNC family, BASE (breast cancer and salivary gland-expressed protein) is a 179 amino acid secreted protein that is named for its expression pattern. Due to its 63% sequence similarity with the related protein, Latherin, it is suggested that BASE is the major protein in sweat secretions and has important surfactant properties that lower surface tension. The expression pattern of BASE in many breast cancer cell lines suggests that it may be an easily accessible diagnostic breast cancer marker. Due to the fact that the gene encoding BASE is highly estrogen-repressed, expression of the gene is most likely dependent on HNF-3 $\alpha$  and estrogen-mediated repression requiring ER $\alpha$ .

## REFERENCES

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4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607627. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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7. Bretschneider, N., Brand, H., Miller, N., Lowery, A.J., Kerin, M.J., Gannon, F. and Denger, S. 2008. Estrogen induces repression of the breast cancer and salivary gland expression gene in an estrogen receptor  $\alpha$ -dependent manner. *Cancer Res.* 68: 106-114.
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## CHROMOSOMAL LOCATION

Genetic locus: BP1FA4P (human) mapping to 20q11.21.

## 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.

## SOURCE

BASE (Q-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of BASE of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-85291 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

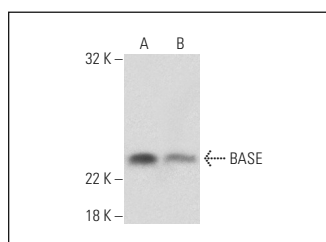
BASE (Q-15) is recommended for detection of BASE of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for BASE siRNA (h): sc-72611, BASE shRNA Plasmid (h): sc-72611-SH and BASE shRNA (h) Lentiviral Particles: sc-72611-V.

Molecular Weight of BASE: 20 kDa.

Positive Controls: LNCaP cell lysate: sc-2231 or HeLa whole cell lysate: sc-2200.

## DATA



BASE (Q-15): sc-85291. Western blot analysis of BASE expression in LNCaP (A) and HeLa (B) whole cell lysates.

## PROTOCOLS

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