

# PLUNC (J-22): sc-133917

## BACKGROUND

The upper respiratory tract is the main place of entry for pathogens to invade the body, and early recognition of bacterial products in this region is crucial for host defense. Palate lung nasal epithelial clone PLUNC (or LUNX) is an airway specific secretory protein that is expressed in epithelial tissues and submucosal glands of the oral cavity and upper respiratory tract of humans, mice, rats and cows. PLUNC binds to lipopolysaccharide (LPS) in nasal lavage fluid (NLF) which points to its role in the inflammatory response of the upper airways after exposure to irritants. Decreased levels of PLUNC occur in the NLF of smokers and people who have been exposed to reactive epoxy chemicals, indicating that long-term exposure to airway irritants impairs the production of PLUNC in the upper respiratory tract. Abnormal expression of PLUNC may influence susceptibility to nasopharyngeal carcinoma in the Chinese population.

## REFERENCES

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4. Da Lee, R., et al. 2004. Differential gene profiles in developing embryo and fetus after in utero exposure to ethanol. *J. Toxicol. Environ. Health Part A* 67: 2073-2084.
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## CHROMOSOMAL LOCATION

Genetic locus: PLUNC (human) mapping to 20q11.21; Plunc (mouse) mapping to 2 H1.

## SOURCE

PLUNC (J-22) is an affinity purified rabbit polyclonal antibody raised against synthetic PLUNC 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

PLUNC (J-22) is recommended for detection of PLUNC of mouse, rat, human and canine 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 PLUNC siRNA (h): sc-39299, PLUNC siRNA (m): sc-61368, PLUNC shRNA Plasmid (h): sc-39299-SH, PLUNC shRNA Plasmid (m): sc-61368-SH, PLUNC shRNA (h) Lentiviral Particles: sc-39299-V and PLUNC shRNA (m) Lentiviral Particles: sc-61368-V.

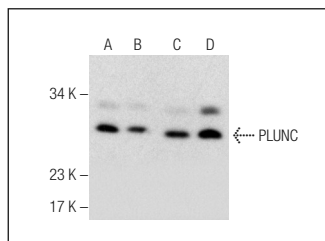
Molecular Weight of PLUNC: 25 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, PC-3 cell lysate: sc-2220 or A549 cell lysate: sc-2413.

## 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<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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).

## DATA



PLUNC (J-22): sc-133917. Western blot analysis of PLUNC expression in Jurkat (A), PC-3 (B), A549 (C) and NCI-H460 (D) whole cell lysates.

## 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.

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Try **PLUNC (G-7): sc-398364** or **PLUNC (A-11): sc-271457**, our highly recommended monoclonal alternatives to PLUNC (J-22).