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#### TECHNICAL DATASHEET

## Monoclonal Anti-NAMPT Clone 14A5 Ref # BIO.020.1

### Product description

Description	Monoclonal antibody to Nicotinamide phosphoribosyl transferase (NAMPT)
Host species	Rat
Validated applications	ELISA, WB, HIC, Immunostaining, IP, histology & enzymatic inhibition
Species reactivity	Human & Mouse
Specificity	Antibody specific for the detection in cells or biological fluids of Recombinant Nicotinamide phosphoribosyl transferase (Nampt) or pre-B cell colony-enhancing factor (PBEF)

### Target exploration

**Gene ID:** 59027.

**Accession Number:** Q99KQ4

The Pre-B-cell colony-Enhancing Factor (PBEF) or Nampt is a protein that catalyzes the condensation of nicotinamide with 5-phosphoribosyl-1-pyrophosphate to yield nicotinamide mononucleotide, one step in the biosynthesis of nicotinamide adenine dinucleotide. This protein is thought to be involved in many important biological processes (metabolism, stress response and aging).

### Properties

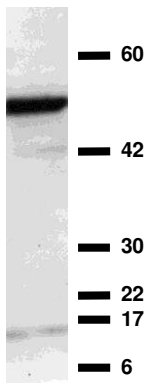
Format	Liquid or Lyophilized
Storage instructions	Store at +4°C short term (1-2 weeks). Aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles
Storage buffer	PBS pH 7.4, preservative upon request
Purity	IgG fraction purified by affinity chromatography on protein G
Isotype	IgG2a
Light type Chain	K
Restrictions	For research use only

## Applications

WB	Recommended dilution : 1/2,000 to 1/10,000
IHC	Recommended dilution : 1/100 to 1/400
ELISA	Recommended dilution : 1/5,000 to 1/20,000

Optimal dilutions/concentrations should be determined by the end user

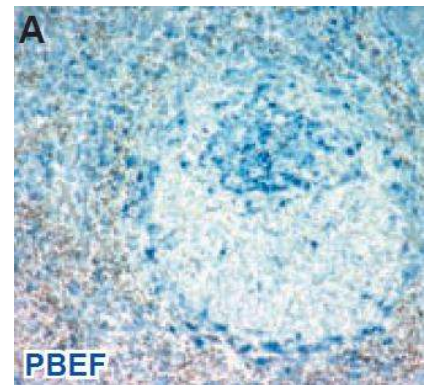
## Illustrations



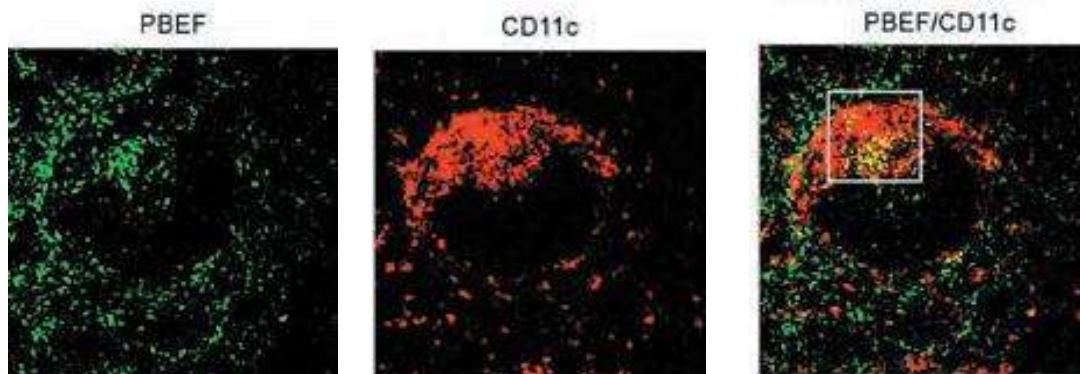
Cell extract from DC cell line was separated by SDS-PAGE and blotted with 14A5 mAb (0.1µg/ml); secondary Ab: anti-rat-HPRT



Nampt is expressed in the cytoplasm. Equal amounts of cytosolic and membrane proteins from anti-CD3 stimulated spleen cells were separated by SDS-PAGE and blotted with 14A5 mAb (0.1µg/ml); secondary Ab: anti-rat-HPRT:



Immunostaining of mouse spleen section (14A5: 10 µg /ml) - secondary Ab: biotinylated anti-rat



Nampt is expressed in distinct spleen cell populations (CD11c positive and negative)  
Immunohistochemistry of mouse spleen section (14A5: 10µg /ml) - secondary Ab: anti-rat-alexa 488; anti-CD11c-alexa 568

## Publications

Rongvaux A., Shea R.J., Mulks M.H., Gigot D., Urbain J., Leo O. and Andris F. - Pre-B-cell colony-enhancing factor, whose expression is up-regulated in activated lymphocytes, is a nicotinamide phosphoribosyltransferase, a cytosolic enzyme involved in NAD biosynthesis. *Eur. J. Immunology*. 2002. 32: 3225-3234