

Product Specification Sheet

BIN 1B subunit Antibodies

Cat. # BIN1B11-P	Rat BIN 1B1 control/ blocking peptide # 1	SIZE: 100 ug
Cat. # BIN1B11-A	Rabbit Anti-Rat BIN 1B1 IgG # 1 (aff pure)	SIZE: 100 ug

HE2 is a human epididymis specific sperm binding secretory protein expressed by SPAG11 gene (chromosome 8p23-p22), a 103aa protein adopts a typical antigenic pattern with a subacrosomal equatorial distribution on the sperm head, this localization of HE2 with Beta-defensins in the epithelial defense system of epididymal duct have developed mechanism to fight ascending infections, including local production of these antimicrobial peptides and proteins.

HE2 represents 3 major isoforms, HE2-alpha, HE2-beta and HE2-gamma, all variants have a common 71 residue N terminus but various C termini, these variations at C termini is due to frame shifting deletions.

BIN 1B: (68aa, Bin 1b gene) The rat ortholog of human HE2 with 29.3% amino acid sequence identity, tends to be effective against invasive pathogenic microorganisms while simultaneously preserving spermatozoa from cytotoxic damage during epididymal transport, maturation, storage and fertility. Since, Bin 1b appears to have different roles in epididymis function and may not only offer an interesting lead for work in contraception but may also have therapeutic implications for sexually transmitted diseases.

Source of Antigen and Antibodies:

Antigen	13aa peptide from rat BIN 1B (Designated BIN1B11-P or control peptide) conjugated to KLH epitope location ~ C-terminus
Antibody host/type	Rabbit, Polyclonal IgG (Cat# BIN1B11-A), purified over antigen-Agarose
Secondary Ab	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
Negative Control Ab	Non-immune rabbit IgG (Cat # 20009-1) to be used as -ve control for ELISA, WB, IHC etc.

Form & Storage of Antibodies/Peptide Control

Affinity pure IgG

100 ug/100ul solution lyophilized powder
Supplied in **Buffer:** PBS+0.1% BSA
Reconstitute powder in PBS at 1mg/ml

Control/blocking peptide

100 ug/100 ul solution lyophilized powder
Supplied in Buffer: PBS pH 7.5,
Reconstitute powder in PBS at 1 mg/ml.

Storage

Short-term: unopened, undiluted liquid vials at -20OC and powder at 4oC or -20oC..

Long-term: at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at -20oC or below.

Shipping: 4oC for solutions and room temp for powder

Recommended Usage

Western Blotting (1:1K-5K for neat serum and 1-10 ug/ml for affinity pure using Chemiluminescence technique.

ELISA (1:10K-1:100K; using 50-100 ng of control peptide/well).

Histochemistry & Immunofluorescence. We recommend the use of affinity purified antibody at 10-30 ug/ml in formaldehyde fixed, paraffin-embedded tissues.

Specificity & Cross-reactivity

The rat Bin1b11-P control peptide is 100% conserved in mouse, 78% in chimp and human HE2 protein. No significant homology detected in other species. Antibody cross-reactivity in various species has not been studied. Control peptide, because of its low mol. Wt (<3 kDa), is not suitable for Western. It should be used for ELISA or antibody blocking experiments (see detailed protocol at the web site).

General References:

(1) Li, P et al (1999) State key Lab of Mol. biology, Shanghai Inst. Of Biochem, China (Unpublished)

**This product is for In vitro research use only.*

Related material available from ADI

Antibodies and Peptides: HE2(α , β , and γ isoforms).

BIN1B11-A-P 71217J

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