

Product Specification Sheet

HE2 beta 2 Subunit Antibodies

Cat. # HE2G31-P	Human HE2G3 control/ blocking peptide # 1	SIZE: 100 ug
Cat. #HE2G31-A	Rabbit Anti-Human HE2G3 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.

HE2 gamma: It is found in 2 isoforms, HE2 gamma1(82aa) and HE2 gamma2 (74aa). The two isoforms functions towards the epithelial defense during ejaculation and sperm binding. This member of epididymis specific family of androgen-regulated proteins in human shows second deletion at C-termini, the gamma2 isoforms contain the HE2 alpha coding region to amino acid 71 where the frame shifting Beta form deletion begins.

Source of Antigen and Antibodies:

Antigen	14aa peptide from Human HE2-gamma (Designated HE2G31-P or control peptide) conjugated to KLH epitope location ~ C-terminal
Antibody host/type	Rabbit, Polyclonal IgG (Cat# HE2G31-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 -20°C and powder at 4oC or -20°C.

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

Stability: 6-12 months at -20°C 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 HE2G31-P control peptide is 100% homologous in humans also identical to human HE2 beta2 sequence, shows no significant homology 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) Hans Henning von Horsten et al (2002) Biol of reproduction 67, 804-813; Hamil, K.G et al (2000) Endocrinology 141 (3), 1245-1253; Peng Li et al (2001) Science 291, 1783-1785; Katherine G Hamil et al (2000) Endocrinology 141, 1245-1253.

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

Related material available from ADI

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

BIN 1B antibodies

HE2G31-A-P 71217J