ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

CUGBP2 (NAPOR/ Brunol 3/ ETR-3) Antibodies

Cat. # CUGBP21-P	Human CUGBP2 Control/blocking peptide # 1	**SIZE**: 100 ug
Cat. # CUGBP21-A	**Rabbit** Anti-Human CUGBP2 IgG # 1 (aff pure)	**SIZE**: 100 ug

RNA editing is an important mechanism for regulating genetic plasticity through the generation of alternative protein products from a single structural gene. There are two types of substitutional RNA exist in mammals, namely A-to-I and C-to-U RNA editing. The best-characterized example of C-to-U RNA editing involves the nuclear transcript encoding intestinal apolipoprotein B (apo B)). Apo B RNA editing changes a CAA to a UAA stop codon, generating a truncated protein, apoB48. The functional complex includes a minimal core composed of apobec-1 and ACF, that function as an adaptor protein by binding both the deaminase and the RNA substrate. The RNA binding proteins also include CUGBP2 which along with Apobec-1 binds to the consensus binding sequence UUUN (A/U) U, present in c-myc, VEGF and Cyclooxygenase-2 (COX2).

CUGBP2/ NAPOR/ Brunol 3/ ETR-3 is a 509aa long protein (Chr 10p13-p14). It exists in 5 isoforms:

Isoforms 1, NAPOR-3	accession # O95319-1 (508 aa)
Isoforms 2, NAPOR-1	1-24 missing, 1-24 changed, 358 changed
Isoforms 3,	1-18 changed, changed, 358 changed
Isoforms 4, NAPOR-2	1-18 changed, changed, 358 changed
Isoforms 5, NAPOR-3	1-24 missing, 1-24 changed, changed, 359 changed

TISSUE SPECIFICITY: Expressed in frontal cortex. Isoform 1 is expressed in brain and lung. Isoform 2 is expressed in heart, brain, placenta, lung, liver, kidney, skeletal muscle and pancreas. Isoform 4 is expressed in heart, lung, skeletal muscle, kidney and pancreas. DEVELOPMENTAL STAGE: Isoform 1 is expressed in fetal brain. Isoform 2 is expressed in fetal heart, brain, thymus, lung, liver, skeletal muscle, kidney and spleen. Isoform 4 is expressed in fetal heart, brain, thymus, lung and skeletal muscle.

Protein name CUG-BP- and ETR-3-like factor 2 ; Synonyms CELF-2; Bruno-like protein 3; RNA-binding protein BRUNOL-3; CUG triplet repeat RNA-binding protein 2; CUG-BP2; ELAV-type RNA-binding protein 3; ETR-3; Neuroblastoma apoptosis-related RNA-binding protein; hNAPOR ; Gene name Name: CUGBP2 ; Synonyms: BRUNOL3, CELF2, ETR3, NAPOR

Source of Antigen and Antibodies

Antigen	18-aa peptide from Human **CUGBP2** (gene accession # **O95319, refs** 1); **Designation (CUGBP21-P, control peptide**) conjugated to KLH
Location	~C-terminus
Ab Host/type	Rabbit, Polyclonal Aff pure IgG (**cat # CUGBP21-A**) purified over antigen-agarose column
2-ab	**Goat Anti-rabbit IgG-HRP** cat # 20320 (AP, biotin, FITC conjugates also available)
-ve control igG	# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as –ve control

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 (1-10 ug/ml for affinity pure antibody using ECL technique).

ELISA: Control peptide can be used to coat ELISA plates at 1 ug/ml and detected with antibodies (0.5-1 ug/ml for affinity pure).

Histochemistry & Immunofluorescence: Not tested. We recommend the use of aff pure IgG at 2-20 ug/ml.

Specificity & Cross-reactivity

The CUGBP21-P control peptide is 100% conserved in rat, mouse and human CUGBP2. No significant conservation of CUGBP21-P is observed with other CUGBP1 or other proteins. Since the epitope of CUGBP21-P is located at the C-terminus, the antibodies are expected to react with all isoforms 1-5. Antibody cross-reactivity in various species or isoforms 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 (use 5-10 ug control peptide per 1 ug of aff pure IgG or 1 ul antiserum) to confirm antibody specificity (see detailed protocol at: www.4adi.com\data\abblock.html).

General References: Shrikant Anant et al (2001) JBC, Vol. 276, No: 50, 47338-47351; Duanxiang Li et al (2001) Genomics 74, 396-401; Lu X et al (1999) Hum. Mol. Genet. 8 (1), 53-60.

*This product is for In vitro research use only.

Related material available from ADI

Antibodies for CUGBP2, Apobec-1, ACF, VEGF, COX1, COX2, COX3 etc..

CUGBP21-A-P 70807A

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