ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

Carboxyl Terminal Modulator Protein (CTMP) Antibodies

Cat. CTMP11-S	Rabbit Anti-Human CTMP Antiserum # 1	**SIZE**: 100 ul
Cat. CTMP11-A	Rabbit Anti-Human CTMP IgG # 1(Aff Pure)	**SIZE**: 100 ug
Cat. CTMP11-P	Human CTMP Control peptide # 1	**SIZE**: 100 ug
Cat. CTMP11-C	Recombinant purified Human CTMP protein Control for WB	**SIZE**: 100 ul

Protein kinase B (PKB) is a major downstream target of receptor tyrosine kinases that signal via phosphatidylinositol 3-kinase (PIK3). Upon cell stimulation, PKB is translocated to the plasma membrane, where it is **phosphorylated on thr308** in the catalytic domain and **ser473** in the C-terminal regulatory domain. Several protein partners for PKB have been identified. **CTMP, a carboxyl terminal modulator protein**, binds to PKB-□ and negatively regulates PKB activity by inhibiting phosphorylation of these PKB residues. CTMP (mouse 248-aa, human 240-aa, chromosome 1q21, **22-26 kDa**) predominantly expressed in skeletal muscle, testis, uterus, brain, and kidney, with lower levels in heart, liver, and lung. The presence of multiple transcripts suggested that CTMP undergoes alternative splicing.

Sources of antigen and antibodies

Antigen	17aa peptide of Human **CTMP** (1); **Designated (CTMP11-P or Control peptide /blocking peptide**) conjugated to KLH. Epitope location ~ C-terminus
Ab Host/type	Rabbit, Polyclonal unpurified antiserum (#**CTMP11-S**) and IgG, purified over antigen-agarose (Cat # **CTMP11-A**)
2-Ab	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
-ve control	# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as –ve control

Human recombinant CTMP protein (protein accession #Q96KR2, 240aa ~27 kda) was expressed as GST-tag protein, GST-tag removed, and purified (>95%). For Western blot +ve control (**Cat # CTMP11-C**) is supplied in SDS-PAGE sample buffer (reduced). Load 10 ul/lane of **CTMP11**-C for good visibility with antibody Cat # **CTMP11**-S. Store at –20oC in suitable size aliquots. SDS may crystallize in cold conditions. It should redissolve by warming before taking it from the stock. It should be heated once prior to loading on gels. If the product has been stored for several weeks, then it may be preferable to add 5 ul of fresh 2x sample buffer per 10 ul of the **CTMP11**-C solution prior to heating and loading on gels. This preparation is not biologically active. It is not suitable for ELISA or other applications where native protein is required. Do not freeze, thaw, or heat repeatedly

Form & Storage of Antibodies/Peptide Control

Antiserum (unpurified)
100ul solution lyophilized powder
Supplied in Buffer: 0.05% azide
Reconstitute powder in 100 ul PBS

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 4°C 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: not tested. We recommend the use of affinity pure antibody at 2-20 ug/ml.

Specificity & Cross-reactivity

The Human CTMP11-P control peptide sequence is 100% conserved in mouse CTMP. Antibody crossreactivity in various species is not known. The 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: the web site).

General References: (1) Maria S-M et al (2001) Science 294, 374-380.

*This product is for in vitro research use only.

Related material available from ADI:

Antibodies against AKT1, AKT2, AKT3

Western Blot recycling kit (Use the same blot to probe with multiple antibodies AKT1, AKT or AKT3,) **recycle blot at room temp in 5-10 min**; No mercaptoethanol or heating required).

CTMP11-S-A-P-C 71210S