ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

Cachectic Factor (CF) Antibodies

Cat. # CACH11-P	Human CF Control Peptide	**SIZE**: 100 ug
Cat. # CACH11-S	Rabbit Anti-Human CF peptide antiserum	**SIZE**: 100 ul

Cancer cachexia is a syndrome of progressive wasting which is believed to be mediated by tumor necrosis factor-alpha, interleukins 1 and 6, and interferon-gamma, and leukemia-inhibitory factor. However, the levels of these putative agents do not correlate with cachexia. Recently, a new circulating tumor factor, termed cachectic factor (CF), has been isolated and characterized from the urine of mice transplanted with adenocarcinoma MAC16 (1). Purified CF, a proteoglycan of relative mol. Wt of ~24 kDa, produces cachexia in vivo by inducing catabolism of skeletal muscle. CF was also found in urine of cachectic cancer patients. It is not found in normal urine, patient with weight loss due to trauma, and cancer patient with no weight loss (1).

CF appears to be ~24 K on SDS-gels. It is a sulfated glycoprotein. The amino acid analyses was determined as: YSP EAA SAP GSG DPS HEA. An antibody raised to the CF also recognized a 69 kDa band with the same amino acid sequence as the 24 K material.

Source of Antigen and Antibodies

Antigen	18-aa peptide of human CF; **Designated (#CACH11-P) control or blocking peptide coupled to KLH**
Ab Host/type	Rabbit, Polyclonal, unpurified antiserum (Cat # CACH11-S)
2-ab	Anti-rabbit IgG-HRP cat # 20320 (AP, biotin, FITC conjugates also available)
-ve control	# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as –ve control

Form & Storage of Antibodies/Peptide Control

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

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: 4°C for solutions and room temp for powder

Recommended Usage

Western Blotting (1:500-2K for neat serum) using ECL technique). An antibody raised to the CF also recognized a 69 kDa band with the same amino acid sequence as the 24 K material.

ELISA: Control peptide can be used to coat ELISA plates at 1 ug/ml and detected with antibodies (1:10-50K for neat serum).

Histochemistry & Immunofluorescence: Not tested. We recommend the use of affinity purified antibody at 1:200-1:500 in paraformaldehyde fixed sections of tissues.

Specificity & Cross-reactivity

The 18 AA human CF is unique to CF. It has some sequence homology with streptococcal preadsorbing antigen involved in pathogenesis of acute post-streptococcal glomerulonephritis (2). No significant sequence homology is detected with other proteins. Antibody cross-reactivity in various species has not been studied. 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 (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:

Todorov P et al (1996) Nature 379, 739-742; Todorov PT et al (1997) J. Biol. Chem. 272, 12279; Cariuk P et al (1997) Br. J. Cancer 76, 606-613; Cancer Res. (1995) 55, 1458-1563. Yoshizawa N et al (1992) J Immunol. 148, 3110-3116..

*This product is for In vitro research use only.

Related material available from ADI

Recycle your blot in Just 5-10 min. (use the same strip for various Dopamine receptors) New formulation will strip antibodies in just a few minutes at room temp. (no boiling or pungent mercaptoethanol).

CACH11-S-C 71215S

Alpha Diagnostic Intl Inc., 6203 Woodlake Center Dr, San Antonio, TX 78244, USA; **Email**: service@4adi.com
☎ (800) 786-5777; (210) 561-9515; **Fax**: (210) 561-9544; **Web Site**: www.4adi.com