

C-HCV

(Combined Hepatitis C Virus, NS3/NS4/NS5)

Recombinant, *E. coli*

| Cat. No. | Amount |
|----------|--------|
| PR-1143 | 100 µg |

For *in vitro* use only
Quality guaranteed for 12 months
Store at -20°C

Avoid freeze / thaw cycles

Form

Liquid. Supplied as 1 mg/ml in 50 mM NaPO₄, pH 8.5, 2.4 mM EDTA, 5 mM DTT, and 0.1% SDS.

Specificity

Immunoreactive with sera of HCV-infected individuals.

Purity

>95% by SDS-PAGE and RP-HPLC

Description

The protein contains the HCV nucleocapsid, NS3, NS4, and NS5 immunodominant regions. Combined Hepatitis C Virus protein is purified by proprietary chromatographic techniques.

Applications

Antigen in ELISA and Western blots, excellent antigen for detection of HCV with minimal specificity problems.

Background

Sequences from 4 gene products (proteins) of the hepatitis C virus (HCV) were scanned by using 3 different PCR-based techniques in search of the most immunoreactive regions suitable for the development of a diagnostic test for the detection of anti-HCV in human sera. All PCR fragments were cloned with pGEX4-2T expression vector and expressed in *E. coli* as chimeric proteins with glutathione S-transferase. The most diagnostically relevant proteins identified in this study were then constructed into one recombinant antigen.

Selected References:

- Kang *et al.* (2005) Proteomic profiling of cellular proteins interacting with the hepatitis C virus core protein. *Proteomics*. Apr 21; [Epub ahead of print].
- Fukutomi *et al.* (2005) Hepatitis C virus core protein stimulates hepatocyte growth: Correlation with upregulation of wnt-1 expression. *Hepatology*. **41**:1096.
- Gaudy *et al.* (2005) Usefulness of the hepatitis C virus core antigen assay for screening of a population undergoing routine medical checkup. *J. Clin. Microbiol.* **43**:1722.
- Lindh *et al.* (2005) Monitoring treatment response by the hepatitis C virus core antigen assay. *Eur. J. Clin. Microbiol. Infect. Dis.* **24**:230.
- Boni *et al.* (2005) Hepatitis C Virus Core Protein Acts as a trans-Modulating Factor on Internal Translation Initiation of the Viral RNA. *J. Biol. Chem.* **280**:17737.