Anti-polyprotein(contain: Core protein p21) Polyclonal Antibody

Cat. #: 60B395

Description:

Core protein (Core protein p21 (Capsid protein C) (p21) and Core protein p19) packages viral RNA to form a viral nucleocapsid, and promotes virion budding. Core protein modulates viral translation initiation by interacting with HCV IRES and 40S ribosomal subunit. Core protein also regulates many host cellular functions such as signaling pathways and apoptosis. It prevents the establishment of cellular antiviral state by blocking the interferon-alpha/beta (IFN-alpha/beta) and IFN-gamma signaling pathways and by inducing human STAT1 degradation. Core protein is thought to play a role in virus-mediated cell transformation leading to hepatocellular carcinomas. It interacts with, and activates STAT3 leading to cellular transformation. Core protein may repress the promoter of p53, and sequester CREB3 and SP110 isoform 3/Sp110b in the cytoplasm. It also represses cell cycle negative regulating factor CDKN1A, thereby interrupting an important check point of normal cell cycle regulation. Targets transcription factors involved in the regulation of inflammatory responses and in the immune response: suppresses NK-kappaB activation, and activates AP-1. Core protein could mediate apoptotic pathways through association with TNF-type receptors TNFRSF1A and LTBR, although its effect on death receptor-induced apoptosis remains controversial. It enhances TRAIL mediated apoptosis, suggesting that it might play a role in immune-mediated liver cell injury. Seric core protein is able to bind C1QR1 at the T-cell surface, resulting in down-regulation of T-lymphocytes proliferation. Core protein may transactivate human MYC, Rous sarcoma virus LTR, and SV40 promoters. It may suppress the human FOS and HIV-1 LTR activity. Core protein may alter lipid metabolism by interacting with hepatocellular proteins involved in lipid accumulation and storage.

Immunogen/Specificity:

Polyclonal antibody produced in rabbits immunizing with a synthetic peptide corresponding to N-terminal residues of Hepatitis C virus core protein

References

Cantaloube,J.F., et al, J. Gen. Virol. 84 (Pt 2), 441-446 (2003)
Youn,J.W., et al, J. Virol. 77 (21), 11596-11602 (2003)
Bukh,J., et al, J. Infect. Dis. 178 (4), 1193-1197 (1998)
McLauchlan,J., J. Viral Hepat. 7 (1), 2-14 (2000)
Penin,F., et al, Hepatology 39 (1), 5-19 (2004)

Clone Number:
Isotype:
Species: Hepatitis C virus
Storage and Stability: at -20oC

Storage buffer:

This antibody is stored in PBS, 0.01% sodium azide and 50% glycerol.

Preparation:

Purified by antigen-specific affinity chromatography.

Applications :

ELISA
Western Blotting (1μg/ml for 2hrs)

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