

DESCRIPTION

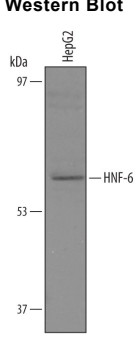
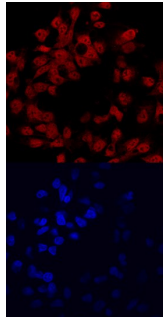
Species Reactivity	Human
Specificity	Detects human HNF-6/ONECUT1 in direct ELISAs and Western blots. In direct ELISAs, approximately 5% cross-reactivity with recombinant human ONECUT2 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human HNF-6/ONECUT1 Gln139-Gly283 Accession # Q9UBC0
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	See Below

DATA

Western Blot	Immunocytochemistry
 <p>Detection of Human HNF-6/ONECUT1 by Western Blot. Western blot shows lysates of HepG2 human hepatocellular carcinoma cell line. PVDF Membrane was probed with 1 µg/mL of Human HNF-6/ONECUT1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6277) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for HNF-6/ONECUT1 at approximately 60 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	 <p>HNF-6/ONECUT1 in HepG2 Human Cell Line. HNF-6/ONECUT1 was detected in immersion fixed HepG2 human hepatocellular carcinoma cell line using Human HNF-6/ONECUT1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6277) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red, upper panel; Catalog # NL010) and counterstained with DAPI (blue, lower panel). Specific staining was localized to cytoplasm and nuclei. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p>

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

HNF-6 (also ONECUT1; one "cut" domain family member 1; OC-1) is a monomeric 53-56 kDa member of the One Cut-domain containing class of homeodomain proteins. It is expressed in embryonic hepatic and pancreatic islet anlage, plus adult hepatocytes and intestinal epithelial cells. HNF-6 is a transcriptional activator that is known to interact with Foxa2. Genes regulated by HNF-6 include Glut2, α1AT, α-fetoprotein and HNF-3β. Human HNF-6 is 465 amino acids (aa) in length. It contains two DNA-binding regions, one classified as a CUT domain (aa 283-369) and another as a homeobox domain (aa 385-444). HNF-6 is both acetylated and phosphorylated, contributing to protein stability and transactivation activity. Over aa 139-283, human HNF 6 shares 99% aa identity with mouse HNF-6. Rat HNF-6 shows a 26 aa insertion after Ala368. Given an overall aa identity of 99% between rat and human, the possibility exists that this insertion may also exist in human.