

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human HNF-3β/FoxA2 in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human HNF-3β/FoxA2 Met242-Ser457 Accession # Q9Y261
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.

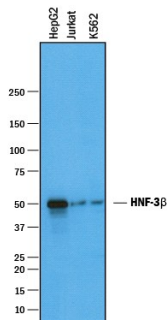
APPLICATIONS

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
Chromatin Immunoprecipitation (ChIP)	5 μg/5 x 10 ⁶ cells	See Below
Immunocytochemistry	5-15 μg/mL	See Below

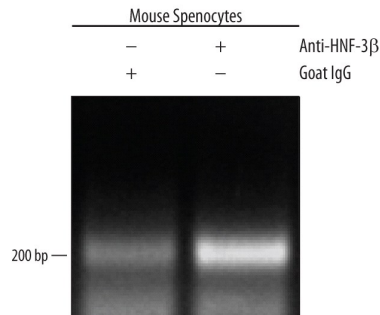
DATA

Western Blot



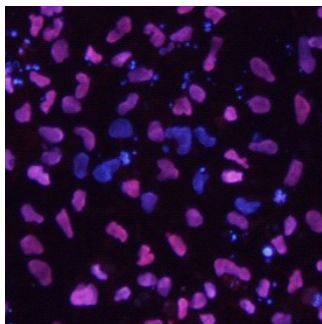
Detection of Human HNF-3β/FoxA2 by Western Blot. Western blot shows lysates of HepG2 human hepatocellular carcinoma cell line, Jurkat human acute T cell leukemia cell line, and K562 human chronic myelogenous leukemia cell line. PVDF membrane was probed with 1 μg/mL of Goat Anti-Human HNF-3β/FoxA2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2400) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for HNF-3β/FoxA2 at approximately 48 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Chromatin Immunoprecipitation (ChIP)



Detection of HNF-3β/FoxA2-regulated Genes by Chromatin Immunoprecipitation. Mouse spenocytes were fixed using formaldehyde, resuspended in lysis buffer, and sonicated to shear chromatin. HNF-3β/FoxA2/DNA complexes were immunoprecipitated using 5 μg Goat Anti-Human HNF-3β/FoxA2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2400) or control antibody (Catalog # AB-108-C) for 15 minutes in an ultrasonic bath, followed by Biotinylated Anti-Goat IgG Secondary Antibody (Catalog # BAF109). Immunocomplexes were captured using 50 μL of MagCollect Streptavidin Ferrofluid (Catalog # MAG999) and DNA was purified using chelating resin solution. The *E-RABP* promoter was detected by standard PCR.

Immunocytochemistry



HNF-3β/FoxA2 in Endoderm Differentiated BG01V Human Stem Cells. HNF-3β/FoxA2 was detected in immersion fixed endoderm differentiated BG01V human embryonic stem cells using 10 μg/mL Goat Anti-Human HNF-3β/FoxA2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2400) for 3 hours at room temperature. Cells were stained with the NorthernLights™ 567-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). View our protocol for *Fluorescent ICC Staining of Cells on Coverslips*.

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-3 β , also known as FoxA2, is a member of the forkhead class of DNA-binding proteins. It is a transcriptional activator for liver-specific transcripts such as albumin and transthyretin. Similar family members play roles in the differentiation of the pancreas and liver.