

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human HNF-3 α /FoxA1 in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # 654126
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human HNF-3 α /FoxA1 Met253-Ser472 Accession # P55317
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μ m filtered solution in PBS.

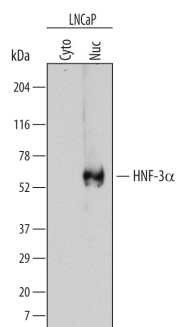
APPLICATIONS

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 μ g/mL	See Below
Immunocytochemistry	8-25 μ g/mL	See Below
Immunohistochemistry	1-25 μ g/mL	See Below

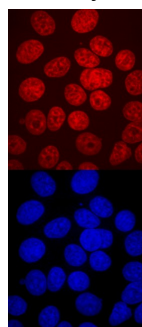
DATA

Western Blot



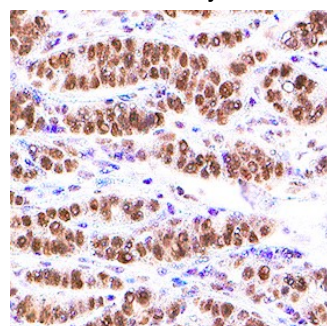
Detection of Human HNF-3 α /FoxA1 by Western Blot. Western blot shows lysates of LNCaP human prostate cancer cell line. Gels were loaded with 30 μ g of cytoplasmic (Cyto) and 30 μ g of nuclear extracts (Nuc). PVDF Membrane was probed with 1 μ g/mL of Mouse Anti-Human HNF-3 α /FoxA1 Monoclonal Antibody (Catalog # MAB6778) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for HNF-3 α /FoxA1 at approximately 60 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



HNF-3 α /FoxA1 in MCF-7 Human Cell Line. HNF-3 α /FoxA1 was detected in immersion fixed MCF-7 human breast cancer cell line using Mouse Anti-Human HNF-3 α /FoxA1 Monoclonal Antibody (Catalog # MAB6778) at 10 μ g/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red, upper panel; Catalog # NL007) and counterstained with DAPI (blue, lower panel). Specific staining was localized to nuclei. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunohistochemistry



HNF-3 α /FoxA1 in Human Breast Cancer Tissue. HNF-3 α /FoxA1 was detected in immersion fixed paraffin-embedded sections of human breast cancer tissue using Mouse Anti-Human HNF-3 α /FoxA1 Monoclonal Antibody (Catalog # MAB6778) at 1.7 μ g/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to nuclei in cancer cells. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
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

FoxA1 (forkhead box A1), also called HNF-3 α (hepatocyte nuclear factor 3 alpha) or TCF3A (transcription factor 3A) is a 473 amino acid (aa), 49 kDa (predicted) protein of the forkhead nuclear transcription factor family. It regulates transcription downstream of the estrogen receptor and other steroid hormone receptors. FoxA1 is expressed in breast luminal cells and correlates with proliferation in breast cancer cell lines. Within the sequence used as an immunogen, human FoxA1 shares 93% and 86% aa identity with mouse and rat FoxA1, respectively.