

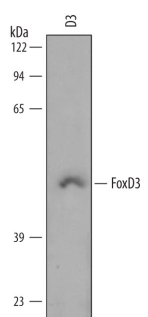
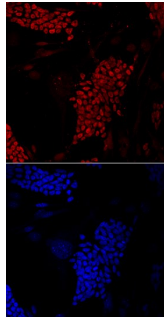
DESCRIPTION	
Species Reactivity	Mouse
Specificity	Detects mouse FoxD3 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human (rh) FoxD3, rhFoxB2, rhFoxH1, and recombinant mouse FoxC2 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse FoxD3 Met1-Val130 Accession # Q61060
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 Mouse FoxD3 by Western Blot. Western blot shows lysates of D3 mouse embryonic stem cell line. PVDF membrane was probed with 1 µg/mL of Goat Anti-Mouse FoxD3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5090) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for FoxD3 at approximately 50 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.</p>	 <p>FoxD3 in D3 Mouse Stem Cells. FoxD3 was detected in immersion fixed D3 mouse embryonic stem cells grown on iMEF using Goat Anti-Mouse FoxD3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5090) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red, upper panel; Catalog # NL001) and counterstained with DAPI (blue, lower panel). Specific staining was localized to 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

FoxD3 (forkhead box protein D3; also HNF3, HFH2 and Genesis) is a 50 kDa member of the winged helix transcription factor gene family. It is expressed in the epiblast, migrating neural crest, and motoneurons plus interneuron progenitors of the developing spinal cord. Mouse FoxD3 is 465 amino acids (aa) in length. It contains a forkhead DNA binding domain (aa 131-208) plus an Ala-rich region (aa 248-464) that contains a Gly-rich motif (aa 369-399). There appears to be one splice form that shows a four aa insert after Gly261. Over aa 1-130, mouse FoxD3 shares 97% and 79% aa identity with rat and human FoxD3, respectively.