

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Islet-1 in direct ELISAs and Western blots. In direct ELISAs, approximately 10% cross-reactivity with recombinant human Islet-2 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Islet-1 Met4-Ala349 Accession # P61371
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.

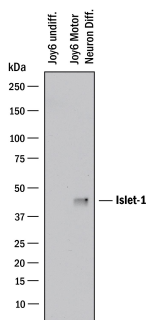
APPLICATIONS

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
Simple Western	10 µg/mL	See Below

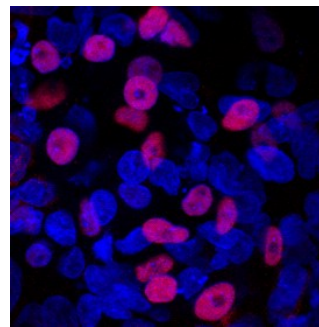
DATA

Western Blot



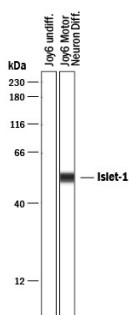
Detection of Human Islet-1 by Western Blot. Western blot shows lysates of JOY6 human induced pluripotent stem cells undifferentiated and differentiated into motor neurons. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human Islet-1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1837) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for Islet-1 at approximately 42 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



Islet-1 in iPS2 Human Stem Cells. Islet-1 was detected in immersion fixed iPS2 human induced pluripotent stem cells differentiated to endocrine progenitor cells using Goat Anti-Human Islet-1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1837) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI(blue). Specific staining was localized to the nucleus. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Simple Western



Detection of Human Islet-1 by Simple Western™. Simple Western lane view shows lysates of JOY6 human induced pluripotent stem cells undifferentiated and differentiated into motor neurons, loaded at 0.2 mg/mL. A specific band was detected for Islet-1 at approximately 53 kDa (as indicated) using 10 µg/mL of Goat Anti-Human Islet-1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1837) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



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

Islet-1 is a member of a family of homeodomain containing transcription factors. It is expressed in all islet cells in the pancreas and is an early marker for motor neuron differentiation.