

DESCRIPTION	
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Islet-1 in direct ELISAs and Western blots. In direct ELISAs, approximately 10% cross-reactivity with recombinant human Islet-2 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Islet-1 Met4-Ala349 Accession # P61371
<b>Formulation</b>	Lyophilized from a 0.2 µm 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 µm filtered solution in PBS.

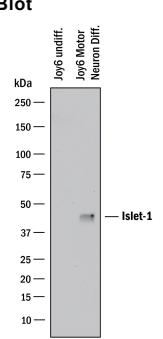
**APPLICATIONS**

**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
<b>Western Blot</b>	1 µg/mL	See Below
<b>Immunocytochemistry</b>	5-15 µg/mL	See Below
<b>Simple Western</b>	10 µg/mL	See Below

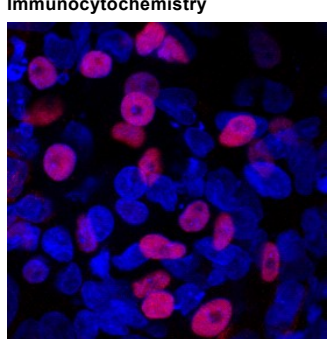
**DATA**

**Western Blot**



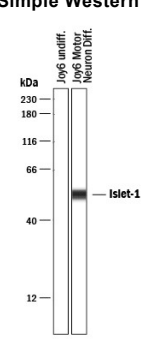
**Detection of Human Islet-1 by Western Blot.** Western blot shows lysates of JOY6 human induced pluripotent stem cells undifferentiated and differentiated into motor neurons. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human Islet-1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1837) 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**

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**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.