**BACKGROUND**

Islet-1 (ISL1 transcription factor, LIM/homeodomain) and Islet-2 (ISL2 transcription factor, LIM/homeodomain) contain amino-terminal LIM domains and a carboxy-terminal homeodomain and both influence developmental events. Islet-1 influences embryogenesis of the pancreatic islets of Langerhans and neural tube motor neuron differentiation. In developing mouse teeth, Islet-1 mediates patterning of dentition as an activator of Bmp4 expression in incisor (distal) areas of the stomatodeal epithelium. Islet-1 expression defines cardiac progenitor cell populations and is required for normal cardiac development and asymmetry. Islet-2 activity in newly generated motor neurons permits the diversification of visceral and somatic motor neuron subtypes in the developing spinal cord. Murine Islet-2 specifies retinal ganglion cell (RGC) laterality by repressing an ipsilateral pathfinding program unique to the ventral-temporal crescent (VTC) of RGCs in a Zic2- and EphB1-dependent manner.

**CHROMOSOMAL LOCATION**

Genetic locus: ISL1 (human) mapping to 5q11.1; Isl1 (mouse) mapping to 13 D2.3.

**SOURCE**

Islet-1 (B-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 244-282 of Islet-1 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-390793 X, 200 µg/0.1 ml.

Islet-1 (B-1) is available conjugated to agarose (sc-390793 AC), 500 µg/0.25 ml agarose in 1 ml, for WB, (HCP) and ELISA; to either phycoerythrin (sc-390793 PE), fluorescein (sc-390793 FITC), Alexa Fluor® 488 (sc-390793 AF488), Alexa Fluor® 546 (sc-390793 AF546), Alexa Fluor® 594 (sc-390793 AF594) or Alexa Fluor® 647 (sc-390793 AF647), 200 µg/ml, for WB (RGB), IF, IHC, and FCM; and to either Alexa Fluor® 680 (sc-390793 AF680) or Alexa Fluor® 790 (sc-390793 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF, and FCM.

Blocking peptide available for competition studies, sc-390793 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.

**STORAGE**

Store at 4°C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**APPLICATIONS**

Islet-1 (B-1) is recommended for detection of Islet-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Islet-1 (B-1) is also recommended for detection of Islet-1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Islet-1 siRNA (h): sc-37121, Islet-1 siRNA (m): sc-37122, Islet-1 shRNA Plasmid (h): sc-37121-SH, Islet-1 shRNA Plasmid (m): sc-37122-SH, Islet-1 shRNA (h) Lentiviral Particles: sc-37121-V and Islet-1 shRNA (m) Lentiviral Particles: sc-37122-V.

Islet-1 (B-1) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Islet-1: 39 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, RAW 264.7 whole cell lysate: sc-2211 or MIA PaCa-2 cell lysate: sc-2285.

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.