



ORDERING INFORMATION

Catalog Number: BAF4244

Lot Number: ZQI01

Size: 50 µg

Formulation: 0.2 µm filtered solution in PBS with BSA

Storage: -20° C

Reconstitution: sterile 0.1% BSA in TBS

Specificity: human Islet-2

Immunogen: *E. coli*-derived rhIslet-2 (aa 1 - 359)

Ig Type: sheep IgG

Applications: Western blot
Immunohistochemistry

Biotinylated Anti-human Islet-2 Antibody

Background

Islet-2 is a member of the LIM homeodomain transcription factors and its expression pattern defines a subclass of motor neurons. Islet-2 contains two amino terminal LIM domains and a carboxy terminal homeodomain. Human Islet-2 shares 93% similarity with mouse Islet-2.

Preparation

Produced in sheep immunized with purified, *E. coli*-derived, recombinant human Islet-2 (rhIslet-2; aa 1 - 359; Accession # Q96A47). Human Islet-2 specific IgG was purified by human Islet-2 affinity chromatography and then biotinylated.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) containing 50 µg of bovine serum albumin (BSA) per 1 µg of antibody.

Reconstitution

Reconstitute with sterile Tris-buffered saline pH 7.3 (20 mM Trizma base, 150 mM NaCl) containing 0.1% BSA. If 1 mL of buffer is used, the antibody concentration will be 50 µg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C **in a manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody has been selected for use as a detection antibody in human Islet-2 Western blots and immunohistochemistry.

Applications

Western blot - This antibody can be used at 0.1 - 0.2 µg/mL with the appropriate secondary reagents to detect human Islet-2. The detection limit for rhIslet-2 is approximately 20 ng/lane under non-reducing and reducing conditions.

Immunohistochemistry - This antibody has been used at a concentration of 10 µg/mL to detect human Islet-2 in E13.5 mouse neural tubes. Cells were fixed with PBS containing 4% paraformaldehyde for 20 minutes at room temperature and blocked with PBS containing 10% normal donkey serum, 0.1% Triton® X-100, and 1% BSA for 45 minutes at room temperature. After blocking, cells were incubated with diluted primary antibody for 3 hours at room temperature followed by R&D Systems NorthernLights™ 557 donkey anti-sheep IgG (Catalog # NL010) at room temperature for 1 hour. Between each step, sections were washed with 0.1% BSA in PBS.

Optimal dilutions should be determined by each laboratory for each application.

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