Biotinylated Anti-human NKX2.5 Antibody

ORDERING INFORMATION

Catalog Number: BAF2444

Lot Number: USD01

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 NKX2.5

Immunogen: *E. coli*-derived rhNKX2.5 (aa 24 - 137)

Ig Type: goat IgG

Applications: Western blot
Immunohistochemistry

Preparation

Produced in goats immunized with purified, *E. coli*-derived, recombinant human NKX2.5 (rhNKX2.5; aa 24 - 137). Human NKX2.5 specific IgG was purified by human NKX2.5 affinity chromatography and then biotinylated. The homeobox transcriptional factor NKX2.5 (Homeobox protein NK-2 homolog E) specifies cardiac and visceral mesoderm and plays an essential role in heart development.

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 the applications listed below.

Applications

Western Blot - This antibody can be used at 0.1 - 0.2 μg/mL with the appropriate secondary reagents to detect human NKX2.5. The detection limit for rhNKX2.5 is approximately 1 ng/lane under non-reducing and reducing conditions.

Immunocytochemistry - This antibody has been used at a concentration of 10 μg/mL to detect human NKX2.5 in human fetal heart sections. Sections 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 overnight at 4° C followed by Rhodamine Red coupled streptavidin at room temperature in the dark for one hour. Between each step, cells were washed with PBS containing 0.1% BSA.

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

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