



Biotinylated Anti-human HAND1 Antibody

ORDERING INFORMATION

Catalog Number: BAF3168

Lot Number: XEI01

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 HAND1

Immunogen: *E. coli*-derived rhHAND1

Ig Type: goat IgG

Applications: Western blot
Immunocytochemistry

Preparation

Produced in goats immunized with purified, *E. coli*-derived, recombinant human Heart And Neural crest Derivatives expressed 1 (rhHAND1; aa 1 - 215; Accession # O96004). Human HAND1 specific IgG was purified by human HAND1 affinity chromatography and then biotinylated. HAND1 belongs to the HAND family of conserved basic helix-loop-helix transcription factors. It is expressed in the heart, ganglia, neural crest derivatives and extraembryonic tissues. HAND1 plays an essential role in heart development and is critical for the specification of extraembryonic tissues including trophoblasts. Human and mouse HAND1 share approximately 92% amino acid sequence homology.

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 HAND1. The detection limit for rhHAND1 is approximately 2 ng/lane under non-reducing and reducing conditions. In this format, this antibody shows approximately 10% cross-reactivity with rhHAND2.

Immunocytochemistry - This antibody can be used at a concentration of 10 µg/mL to detect HAND1 in NTERA2 cells. 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 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.