

ORDERING INFORMATION

Catalog Number: AF2807

Lot Number: VNH01

Size: 100 µg

Formulation: 0.2 µm filtered solution in PBS with 5% trehalose

Storage: -20° C

Reconstitution: sterile PBS

Specificity: human CDX4

Immunogen: *E. coli*-derived rhCDX4 (aa 1 - 170)

Ig Type: goat IgG

Applications: Western blot
Immunohistochemistry
Direct ELISA

Preparation

Produced in goats immunized with purified, *E. coli*-derived, recombinant human Caudal type homeobox Transcription Factor 4 (rhCDX4; aa 1 - 170; Accession # 014627). Human CDX4 specific IgG was purified by human CDX4 affinity chromatography. CDX4 belongs to the caudal-type homeobox protein family of transcription factors, which are involved in early anteroposterior patterning by regulating members of the *HOX* gene family. CDX4 has also been shown to regulate hematopoiesis during embryogenesis and the proliferation and differentiation of epithelial lining in the gut. Abnormal expression of CDX4 is associated with various diseases including cancers of the gut epithelium.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Reconstitution

Reconstitute with sterile PBS. If 0.5 mL of PBS is used, the antibody concentration will be 0.2 mg/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 its ability to recognize human CDX4 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 CDX4. The detection limit for rhCDX4 is approximately 10 ng/lane and 2 ng/lane under non-reducing and reducing conditions, respectively.

Immunohistochemistry - This antibody can be used at a concentration of 10 µg/mL to detect CDX4 in human embryoid body 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 anti-goat IgG at room temperature in the dark for one hour. Between each step, cells were washed with PBS containing 0.1% BSA.

Direct ELISA - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect human CDX4. The detection limit for rhCDX4 is approximately 0.2 ng/well.

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