

#### ORDERING INFORMATION

Catalog Number: BAF3080

Lot Number: WLR01

Size:  $50 \mu g$ 

Formulation: 0.2 µm filtered solution in PBS

with BSA

Storage: -20° C

Reconstitution: sterile 0.1% BSA in TBS

Specificity: human A33 extracellular domain

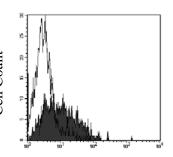
Immunogen: NS0-derived rhA33 extracellular

domain

Ig Type: goat IgG

Applications: Western blot

Flow Cytometry



A33

HT-29 cells were stained with biotinylated anti-A33 (R&D Systems, Cat. # BAF3080, filled histogram) or control antibody (R&D Systems, Cat. # BAF108, open histogram), followed by PE-conjugated streptavidin (R&D Systems, Cat. # F0040).

# Biotinylated Anti-human A33 Antibody

# Preparation

Produced in goats immunized with purified, NS0-derived, recombinant human A33 (rhA33; aa 22 - 235; Accession # Q99795). Human A33 specific IgG was purified by human A33 affinity chromatography and then biotinylated. Human A33, also known as GPA33, is a 43 kDa type I transmembrane glycoprotein that belongs to the CTX (cortical thymocyte marker in *Xenopus*) family of cell adhesion molecules within the immunoglobulin superfamily. Other family members include CXADR, ESAM, BT-IgSF, CD2 and JAM A-C. The extracellular domain (ECD) of human A33 is 214 amino acids (aa) in length and contains one V-type and one C2-type Ig-like domain. This ECD is 80%, 74% and 71% aa identical to canine, bovine and mouse A33 ECD, respectively. A33 is likely to be involved in cell-cell adhesion between epithelial cells.

## **Formulation**

Lyophilized from a 0.2  $\mu$ m filtered solution in phosphate-buffered saline (PBS) containing 50  $\mu$ g of bovine serum albumin (BSA) per 1  $\mu$ g 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  $\mu g/mL$ .

# 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  $0.1 - 0.2 \mu g/mL$  with the appropriate secondary reagents to detect human A33. The detection limit for rhA33 is approximately 2 ng/lane under non-reducing and reducing conditions. In this format, this antibody shows approximately 10% cross-reactivity with rmA33.

**Flow Cytometry -** This antibody was tested in flow cytometetry using HT-29 cells. Dilute this antibody to 50  $\mu$ g/mL and add 10  $\mu$ L of the diluted solution to 1-2.5 x 10 $^{\circ}$  cells in a total reaction volume not exceeding 200  $\mu$ L. The binding of biotinylated antibodies may be visualized by adding a secondary developing reagent such as streptavidin conjugated to a fluorochrome.

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