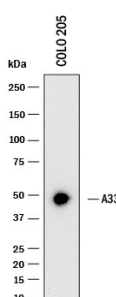
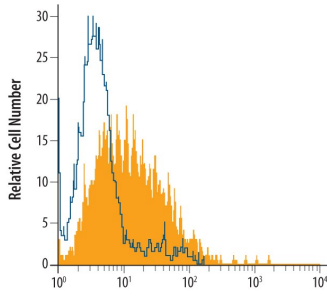
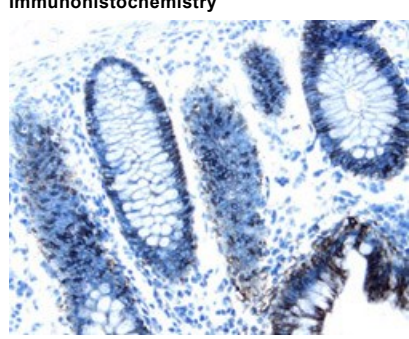
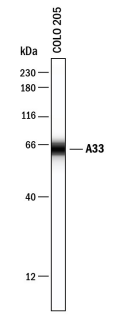



DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human A33 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 10% cross-reactivity with recombinant mouse A33 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human A33 Ile22-Val235 Accession # Q99795
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS		
<i>Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.</i>		
	Recommended Concentration	Sample
Western Blot	1 µg/mL	COLO 205 human colorectal adenocarcinoma cell line
Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
Immunohistochemistry	5-15 µg/mL	See Below
Simple Western	20 µg/mL	COLO 205 human colorectal adenocarcinoma cell line
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA	
<p>Western Blot</p>  <p>Detection of Human A33 by Western Blot. Western blot shows lysates of COLO 205 human colorectal adenocarcinoma cell line. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human A33 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3080) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for A33 at approximately 45 kDa (as indicated). This experiment was conducted under reducing conditions and using Western Blot Buffer Group 1.</p>	<p>Flow Cytometry</p>  <p>Detection of A33 in TH-29 Human Cell Line by Flow Cytometry. TH-29 human colon carcinoma cell line was stained with Human A33 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3080, filled histogram) or isotype control antibody (Catalog # AB-108-C, open histogram), followed by Phycoerythrin-conjugated Anti-Goat IgG Secondary Antibody (Catalog # F0107).</p>
<p>Immunohistochemistry</p>  <p>A33 in Human Colon. A33 was detected in immersion fixed paraffin-embedded sections of human colon using 1.7 µg/mL Goat Anti-Human A33 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3080) overnight at 4 °C. Tissue was stained with the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>	<p>Simple Western</p>  <p>Detection of Human A33 by Simple Western™. Simple Western lane view shows lysates of COLO 205 human colorectal adenocarcinoma cell line, loaded at 0.2 mg/mL. A specific band was detected for A33 at approximately 64 kDa (as indicated) using 20 µg/mL of Goat Anti-Human A33 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3080). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.</p> 

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">• 12 months from date of receipt, -20 to -70 °C as supplied.• 1 month, 2 to 8 °C under sterile conditions after reconstitution.• 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

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, -B, and -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 shares 80%, 74%, and 71% aa sequence identity with canine, bovine, and mouse A33 ECD, respectively. A33 is likely to be involved in cell-cell adhesion between epithelial cells.