

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Fucosyltransferase 8/FUT8 in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human Fucosyltransferase 8/FUT8 Asp32-Lys575 Accession # Q9BYC5
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 as a 0.2 µm filtered solution in PBS.

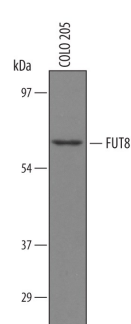
APPLICATIONS

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.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human Fucosyltransferase 8/FUT8, see our available Western blot detection antibodies
Simple Western	10 µg/mL	See Below

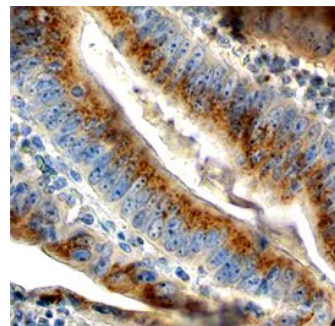
DATA

Western Blot



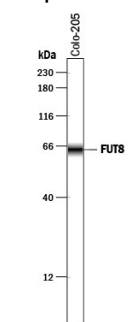
Detection of Human Fucosyltransferase 8/FUT8 by Western Blot. Western blot shows lysates of COLO 205 human colorectal adenocarcinoma cell line. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human Fucosyltransferase 8/FUT8 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5768) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Fucosyltransferase 8/FUT8 at approximately 60 - 65 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.

Immunohistochemistry



Fucosyltransferase 8/FUT8 in Human Colon. Fucosyltransferase 8/FUT8 was detected in paraffin-embedded sections of human colon using Sheep Anti-Human Fucosyltransferase 8/FUT8 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5768) at 3 µg/mL overnight at 4 °C. Before incubation with the primary antibody tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

Simple Western



Detection of Human Fucosyltransferase 8/FUT8 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 Fucosyltransferase 8/FUT8 at approximately 64 kDa (as indicated) using 10 µg/mL of Sheep Anti-Human Fucosyltransferase 8/FUT8 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5768) followed by 1:50 dilution of HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



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

FUT8 (Fucosyltransferase 8; also alpha 1,6 Fucosyltransferase) is a 60-65 kDa member of the glycosyltransferase 23 family of enzymes. It catalyzes the addition of fucose to Asn-linked GlcNAc via an α 1,6 linkage. FUT8 is widely expressed, and the effects of its fucosylation vary. A lack of fucosylation on IgG potentiates ADCC activity, while an absence of fucose on the EGF R and α 3 β 1 integrin decreases their activity. Human FUT8 is a type II transmembrane protein 575 amino acids (aa) in length. It contains a short cytoplasmic region (aa 1-9) plus an extended luminal domain (aa 31-575) that possesses one SH3 homology domain (aa 502-563). There are at least four potential splice variants. There is an alternate start site at Met479, a 14 aa substitution for aa 1-420, a 32 aa substitution for aa 1-161, and a two aa substitution for aa 444-575. Over aa 32-575, human FUT8 shares 97% aa identity with mouse FUT8.