

#### DESCRIPTION

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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                                            |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human MFNG in direct ELISAs and Western blots.                                           |
| <b>Source</b>                                                                                                                                                                                           | Polyclonal Sheep IgG                                                                             |
| <b>Purification</b>                                                                                                                                                                                     | Antigen Affinity-purified                                                                        |
| <b>Immunogen</b>                                                                                                                                                                                        | Mouse myeloma cell line NS0-derived recombinant human MFNG<br>Gly37-Arg321<br>Accession # O00587 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 700<br>Excitation Wavelength: 675-700 nm<br>Emission Wavelength: 723 nm              |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                                     |
| *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |                                                                                                  |

#### 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.

|                            |                                                                        |
|----------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>        | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunoprecipitation</b> | Optimal dilution of this antibody should be experimentally determined. |

#### PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

#### BACKGROUND

MFNG (Manic fringe N-acetylglucosaminyltransferase; also O-fucosylpeptide 3-β-N-acetylglucosaminyltransferase) is a 52 - 55 kDa member of the glucosyltransferase 31 family. It is a Golgi membrane protein that transfers N-acetylglucosamine to an O-linked fucose residue on Notch. Activity on Notch increases Delta-1 induced signaling while suppressing Jagged-1 signaling. MFNG is found in fetal pancreatic endocrine progenitor cells and immature ventricular zone neurons. Human MFNG is a 321 amino acid (aa) type II transmembrane protein. It contains a short 7 aa cytoplasmic region, plus a 294 aa luminal domain (aa 28-321). There are two potential splice variants, one that shows a 15 aa substitution for aa 104-321, and another that contains a three aa substitution for aa 86-102. Over aa 37-321, human MFNG shares 85% aa identity with mouse MFNG.

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