

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Nesfatin-1/Nucleobindin-2 in direct ELISAs and Western blots.
Source	Monoclonal Rat IgG _{2B} Clone # 877140
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Nesfatin-1/Nucleobindin-2 Val25-Leu106 Accession # P80303
Conjugate	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 nm
Formulation	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.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

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

BACKGROUND

Nesfatin-1 (NEFA Encoded Satiety and Fat-influencing protein 1) is a secreted, 10 kDa peptide derived from the translation product of the NUCB2 gene. Nesfatin-1 is associated with neurons involved in feeding (ARH and PVH) and fluid intake (SON and PVH), in β cells of the pancreas, and in adipocytes. Its presence peripherally has an anorexigenic effect. Mature human Nesfatin-1 is 82 amino acids (aa) in length. It is the secreted N-terminus of a larger, intracellular 420 aa precursor termed NEFA/Nucleobindin-2/NUCB2. NUCB2 contains a signal sequence (aa 1-24), Nesfatin-1 (aa 25-106), a DNA-binding site (aa 171-223), and two EF-hand regions (aa 241-276 and 293-328). Intracellular uncleaved NUCB2 is 45-50 kDa in size. There is a potential for multiple cleavages, generating Nesfatin-2 (aa 109-187) and Nesfatin-3 (aa 190-420). Human Nesfatin-1 shares 85% aa identity with mouse Nesfatin-1.

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