

**DESCRIPTION**

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects a synthetic peptide specific for human RBFOX3 around amino acid 25 in Direct ELISA.
<b>Source</b>	Recombinant Monoclonal Rabbit IgG Clone # 3202C
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Synthetic Peptide Accession # A6NFN3
<b>Conjugate</b>	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
<b>Formulation</b>	Supplied 0.2 mg/mL in a saline solution containing BSA and 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>Immunohistochemistry</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**

RBFOX3, also known as Neuronal nuclei (NeuN), is a 34kDa marker of post-mitotic neurons that is highly conserved among different species. The RBFOX family regulates alternative splicing and is encoded by three genes: RBFOX1, RBFOX2 and RBFOX3. RBFOX3 mediates hippocampal circuitry, neurogenesis, and synaptogenesis. RBFOX3 plays a crucial role in normal synaptic function and is implicated in human neurological functions and mutations have been linked to neurodevelopmental delay, cognitive impairment, autistic features, and epilepsy.

**References:**

1. Wang HY, Hsieh PF, Huang DF, Chin PS, Chou CH, Tung CC, Chen SY, Lee LJ, Gau SS, Huang HS. RBFOX3/NeuN is Required for Hippocampal Circuit Balance and Function. *Sci Rep.* 2015 Dec 1;5:17383. doi: 10.1038/srep17383. PMID: 26619789; PMCID: PMC4664964.
2. Huang DF, Lee CY, Chou MY, Yang TY, Cao X, Hsiao YH, Wu RN, Lien CC, Huang YS, Huang HP, Gau SS, Huang HS. Neuronal splicing regulator RBFOX3 mediates seizures via regulating Vamp1 expression preferentially in NPY-expressing GABAergic neurons. *Proc Natl Acad Sci U S A.* 2022 Aug 16;119(33):e2203632119. doi: 10.1073/pnas.2203632119. Epub 2022 Aug 11. PMID: 35951651; PMCID: PMC9388145.

**PRODUCT SPECIFIC NOTICES**

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