

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human 14-3-3ζ in direct ELISAs and Western blots. Detects Mouse and Rat 14-3-3ζ in Western Blots. In direct ELISAs, no cross-reactivity with recombinant human 14-3-3 beta, theta, eta, gamma, sigma, or epsilon is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 818515
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human 14-3-3ζ Asp2-Asn245 Accession # P63104
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 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.
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

14-3-3 proteins are a highly conserved family of homo- and heterodimeric phosphoserine/threonine-binding proteins present in high abundance in all eukaryotic cells. 14-3-3 proteins were the first polypeptides shown to have pSer/Thr binding properties, generally recognizing the consensus sequences RSXpSXP and RXY/FXpSXP (where X is any amino acid). 14-3-3 proteins act as key regulators of intracellular signal transduction through their ability to bind specific motifs phosphorylated on serine or threonine. For example, the binding of 14-3-3 to phosphorylated BAD blocks its proapoptotic association with Bcl-XL. There are at least seven distinct 14-3-3 genes in vertebrates, alpha/beta, epsilon, eta, gamma, theta, sigma and zeta (α/β, ε, η, γ, τ/θ, σ, and ζ/δ). 14-3-3 zeta, also known as Tyrosine 3-Monooxygenase/Tryptophan 5-Monooxygenase Activation Protein, zeta isoform (gene name YWHAZ) is a 245 amino acid, 27 kDa protein.

PRODUCT SPECIFIC NOTICES

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