Human HIPK2 Antibody

Monoclonal Mouse IgG_1 Clone # 493918

Catalog Number: MAB9307

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human HIPK2 in direct ELISAs.
Source	Monoclonal Mouse IgG_1 Clone # 493918
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant human HIPK2 Met765-Ser924 Accession # Q9H2X6
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.

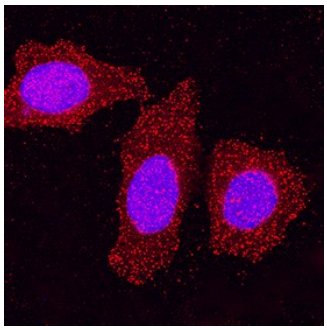
APPLICATIONS

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
Immunocytochemistry	5-25 µg/mL	See Below

DATA

Immunocytochemistry



HIPK2 in MCF-7 Human Cell Line. HIPK2 was detected in immersion fixed MCF-7 human breast cancer cell line using Mouse Anti-Human HIPK2 Monoclonal Antibody (Catalog # MAB9307) at 8 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm and nuclei. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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.** ● 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

Homeodomain-interacting protein kinase-2 (HIPK2) is a serine/threonine kinase which interacts with transcription factors, including p53, CREB1, SMAD1, SMAD2, RUNX1 and others, and can act as a corepressor or coactivator depending on the transcription factor and subcellular localization. Post-translational modifications control HIPK2 activity, including phosphorylation, small ubiquitin-like modifier modification, acetylation, and ubiquitination. HIPK2 regulation of cell proliferation makes it a key effector of proliferative diseases including cancer and kidney fibrosis. For example, HIPK2 can repress the proliferative Wnt-1/b-catenin pathway and HIF-1, promote apoptosis by activation of p53 and repression of ΔNp63α, MDM2 and CtBP, and its activity is enhanced by anti-cancer drugs such as cisplatin and etoposide. HIPK2 oncorepession can be blocked by cytoplasmic localization, hypoxia, gene mutation and loss of heterozygosity.

References:

(Saul VV and Schmitz ML, J Mol Med (Berl). 2013 Sep;91(9):1051-8.) (Saul VV and Schmitz ML, J Mol Med (Berl). 2013 Sep;91(9):1051-8.) (D'Orazi G, et al, J Exp Clin Cancer Res. 2012 Aug 13;31:63.)

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 Europe | Middle East | Africa TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956