Anti importin beta1 monoclonal antibody

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Overview

A highly specific and sensitive anti-Importin b1 (KPNB1) monoclonal antibody. The mAb recognizes an epitope comprising residues 301-320 of human KPBN1 and is highly specific for cytoplasmic KPNB1 in diverse applications.

Description

Importin b1 (KPNB1) is a nucleocytoplasmic transport factor with critical roles in both cytoplasmic and nucleocytoplasmic transport, hence there is keen interest in its characterization and subcellular interactomes. However, the current efficiency of proximity-dependent biotin identification (BioID) in detecting importin complex cargos is very limited. Therefore, Prof. Fainzilber and his team generated a highly specific and sensitive anti-KPNB1 monoclonal antibody, which enables Biotinylation by Antibody Recognition (BAR) analysis of importin b1 interactomes. The monoclonal antibody recognizes an epitope comprising residues 301-320 of human KPBN1, and strikingly is highly specific for cytoplasmic KPNB1 in diverse applications, with little or no reaction with KPNB1 in the nucleus. BAR with this novel antibody revealed numerous new interactors of importin b1, expanding the KPNB1 interactome to cytoplasmic and signaling complexes that highlight potential new functions for the importins complex beyond nucleocytoplasmic transport.Â Additional data is available on Biorxiv - https://www.biorxiv.org/content/10.1101/2022.03.23.485495v1 [1]