

Anti-KIAA1524 Picoband Antibody

Catalog # ABO12400

Specification

Anti-KIAA1524 Picoband Antibody - Product Information

Application WB
Primary Accession Q8TCG1
Host Rabbit

Reactivity
Clonality
Format

Human, Mouse
Polyclonal
Lyophilized

Description

Rabbit IgG polyclonal antibody for Protein CIP2A(KIAA1524) detection. Tested with WB in Human; Mouse.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-KIAA1524 Picoband Antibody - Additional Information

Gene ID 57650

Other Names

Protein CIP2A, Cancerous inhibitor of PP2A, p90 autoantigen, KIAA1524, CIP2A

Calculated MW

102185 MW KDa

Application Details

Western blot, 0.1-0.5 μg/ml, Human, Mouse

Subcellular Localization

Membrane ; Single-pass membrane protein . Cytoplasm . Slightly concentrates in the perinuclear region.

Tissue Specificity

Expressed at low levels in most of the tissues. Overexpressed in head-and-neck squamous cell carcinomas (HNSCC). Present in liver cancer cells (at protein level).

Protein Name

Protein CIP2A

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human KIAA1524 (854-889aa EVQKAQLEGRLEEKESLVKLQQEELNKHSHMIAMIH), different from the related mouse sequence by three amino acids.



Purification Immunogen affinity purified.

Cross ReactivityNo cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-KIAA1524 Picoband Antibody - Protein Information

Name CIP2A {ECO:0000303|PubMed:17632056, ECO:0000312|HGNC:HGNC:29302}

Function

Acts as an inhibitor of protein phosphatase PP2A (PubMed:17632056). Promotes anchorage-independent cell growth and tumor formation by preventing dephosphorylation of MYC, thereby stabilizing MYC in human malignancies (PubMed:17632056). Together with TOPBP1, plays an essential role in the response to genome instability generated by the presence of acentric chromosome fragments derived from shattered chromosomes within micronuclei (PubMed:<a href="http://www.uniprot.org/citations/35121901"

target="_blank">35121901, PubMed:35842428, PubMed:37165191, PubMed:37316668). Micronuclei, which are frequently found in cancer cells, consist of chromatin surrounded by their own nuclear membrane: following breakdown of the micronuclear envelope, a process associated with chromothripsis, the CIP2A-TOPBP1 complex tethers chromosome fragments during mitosis to ensure clustered segregation of the fragments to a single daughter cell nucleus, facilitating re-ligation with limited chromosome scattering and loss (PubMed:37165191, PubMed:37316668).

Cellular Location

Cytoplasm. Chromosome. Note=Predominantly localizes within the cytoplasm (PubMed:35842428). Localizes to broken chromosomes within micronuclei during interphase and following chromothripsis (PubMed:37165191, PubMed:37316668). Localization to broken chromosomes is mainly independent of MDC1 (PubMed:35121901, PubMed:37165191)

Tissue Location

Expressed at low levels in most of the tissues. Overexpressed in head-and-neck squamous cell carcinomas (HNSCC) Present in liver cancer cells (at protein level)

Anti-KIAA1524 Picoband Antibody - Protocols

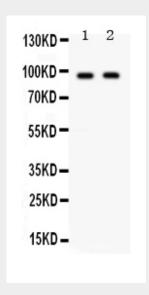
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry



- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Anti-KIAA1524 Picoband Antibody - Images



Anti- KIAA1524 Picoband antibody, ABO12400, Western blottingAll lanes: Anti KIAA1524 (ABO12400) at 0.5ug/mlLane 1: Mouse Testis Tissue Lysate at 50ugLane 2: HELA Whole Cell Lysate at 40ugPredicted bind size: 102KDObserved bind size: 90KD

Anti-KIAA1524 Picoband Antibody - Background

Protein CIP2A, also known as cancerous inhibitor of PP2A (CIP2A), is a protein that in humans is encoded by the KIAA1524Â gene. CIP2A is required for the malignant cellular growth and for in vivo tumor formation. In accordance with the oncogenic role of CIP2A, overexpression of CIP2A promotes Ras-elicited cell growth and transforms immortalized human cells (HEK-TERVs). More recently CIP2A has been shown to regulate phosphorylation and activity of many other oncoproteins and to drive malignant cell growth and tumorigenesis in various human cancer types. Importantly, CIP2A deficient mice are viable, suggesting that targeting of oncogenic function of CIP2A would not result in serious side-effects.