PRODUCT INFORMATION



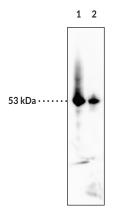
p53 Monoclonal Antibody (Clone BP53-12)

Item No. 10004806

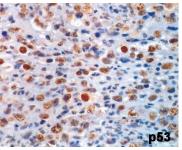
Overview and Properties

Contents: Synonyms:	This vial contains 100 μg of protein A-affinity purified monoclonal antibody. Antigen NY-CO-13, Cellular Tumor Antigen p53, Phosphoprotein p53, Transformation- related Protein 53, Tumor Protein p53, Tumor Suppressor p53
Immunogen:	Recombinant human wild-type p53
Species Reactivity	: (+) Human and mouse; other species not tested
Uniprot No.:	P04637
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS, pH 7.2, with 0.02% sodium azide
Clone:	BP53-12
Host:	Mouse
Isotype:	lgG2a
Applications:	Flow cytometry (FC), immunohistochemistry (IHC) (paraffin-embedded tissue), immunoprecipitation (IP), and Western blot (WB); the recommended starting concentration for FC, IHC (paraffin-embedded tissue), and IP is 1:500 and 1:1,000 for WB. Other applications were not tested, therefore optimal working concentration/ dilution should be determined empirically.

Images



Lane 1: Mouse Lung Homogenate (50 µg) Lane 2: A549 Cell Lysate (40 µg)



p53 Expression in non-Hodgkin's lymphoma (immunoperoxidase method)

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user <u>must</u> review the <u>complete</u> Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/12/2023

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM

PRODUCT INFORMATION



Description

Cellular p53, often called the "guardian of the genome," is a transcription factor that is activated in response to cellular stress (DNA damage, hypoxia, heat shock, etc.) and acts to prevent further proliferation of the stressed cell by induction of cell cycle arrest or apoptotic mediators.¹ Nearly 50% of human tumors have mutated or non-functional p53. This antibody is suitable for a variety of techniques to distinguish between p53 positive and p53 negative tumors.² This antibody binds the N-terminal (amino acids 16-25) of wild-type and mutant p53. This antibody does not work with frozen tissue sections. Cayman's p53 Monoclonal Antibody (Clone BP53-12) can be used for flow cytometry, immunohistochemistry, immunoprecipitation, and Western blot applications. The antibody recognizes p53 at 53 kDa from human and mouse samples.

References

- 1. El-Deiry, W.S. The p53 pathway and cancer therapy. Cancer J. 11, 229-236 (1998).
- 2. Bártek, J., Bártková, J., Lukás, J., et al. Immunohistochemical analysis of the p53 oncoprotein on paraffin sections using a series of novel monoclonal antibodies. J. Pathol. 169, 27-34 (1993).

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM