Datasheet for ABIN94449

anti-p53 antibody (FITC)

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Overview

Quantity:	100 µg
Target:	p53 (TP53)
Reactivity:	Human, Non-Human Primate
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This p53 antibody is conjugated to FITC
Application:	Intracellular Flow Cytometry (ICFC)

Product Details

Purpose:	Anti-p53 FITC
Immunogen:	Bacterially expressed full-length wild-type p53
Clone:	BP53-12
Isotype:	IgG2a
Specificity:	The antibody BP53-12 recognizes a defined epitope (aa 16-25) on human p53, a 50 kDa intracellular tumour suppressor found in increased amounts in a wide variety of transformed cells, it is frequently mutated or inactivated in many types of cancer.
Cross-Reactivity (Details):	Human, Non-Human Primates
Purification:	Purified antibody is conjugated with fluorescein isothiocyanate (FITC) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.

Target Details

Target:	p53 (TP53)
Alternative Name:	p53 (TP53 Products)
Background:	Tumor protein p53,The tumour suppressor protein p53 is a key element of intracellular anticancer protection. It mediates cell cycle arrest or apoptosis in response to DNA damage or to starvation for pyrimidine nukleotides. It is up-regulated in response to these stress signals and stimulated to activate transcription of specific genes, resulting in expression of p21waf1 and other proteins involved in G1 or G2/M arrest, or proteins that trigger apoptosis, such as Bcl-2. The structure of p53 comprises N-terminal transactivation domain, central DNA-binding domain, oligomerisation domain, and C-terminal regulatory domain. There are various phosphorylation sites on p53, of which the phosphorylation at Ser15 is important for p53 activation and stabilization.,BCC7, TRP53, TP53, LFS1
Gene ID:	7157
UniProt:	P04637
Pathways:	p53 Signaling, MAPK Signaling, PI3K-Akt Signaling, Apoptosis, AMPK Signaling, Chromatin Binding, ER-Nucleus Signaling, Positive Regulation of Endopeptidase Activity, Hepatitis C, Protein targeting to Nucleus, Autophagy, Warburg Effect

Application Details

Application Notes:	Flow cytometry: Recommended dilution: 3 µg/mL. Intracellular staining.
Restrictions:	For Research Use only

Handling

Concentration:	1 mg/mL
Buffer:	Phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	**Do not freeze.** Avoid prolonged exposure to light.
Storage:	4 °C
Storage Comment:	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

Publications

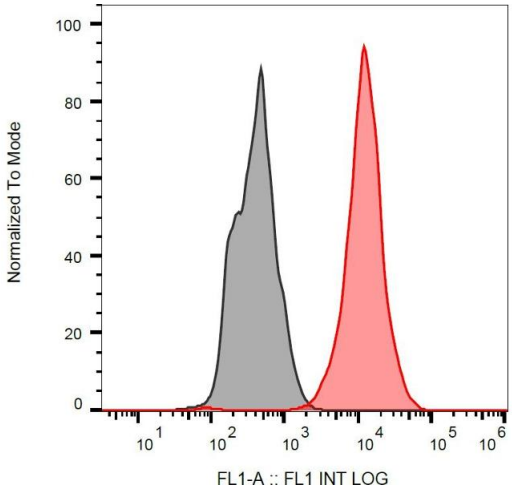
Product cited in:

Dolezalová, Vojt?sek, Kovarík: "Epitope analysis of the human p53 tumour suppressor protein." in: **Folia biologica**, Vol. 43, Issue 1, pp. 49-51, (1997) (PubMed).

Bártek, Bártková, Vojt?sek, Stasková, Lukás, Rejthar, Kovarík, Midgley, Gannon, Lane: "Aberrant expression of the p53 oncoprotein is a common feature of a wide spectrum of human malignancies." in: **Oncogene**, Vol. 6, Issue 9, pp. 1699-703, (1991) (PubMed).

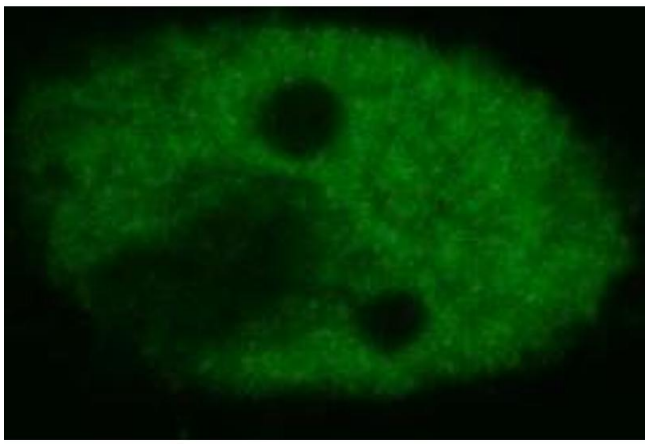
Bártková, Bártek, Lukás, Vojt?sek, Stasková, Rejthar, Kovarík, Midgley, Lane: "p53 protein alterations in human testicular cancer including pre-invasive intratubular germ-cell neoplasia." in: **International journal of cancer. Journal international du cancer**, Vol. 49, Issue 2, pp. 196-202, (1991) (PubMed).

Images



Flow Cytometry

Image 1. Separation of Ramos cells stained using anti-p53 (BP53.12) FITC antibody (concentration in sample 9 µg/mL, red) from unstained Ramos cells (black) in flow cytometry analysis (intracellular staining).



Confocal Microscopy

Image 2. Confocal microscopy of human HeLa cells using anti-p53 (BP53-12 ; FITC). The expression of p53 protein was enhanced by intercalating reagent. Cells were fixed and permeabilized before incubation with the p53-FITC MAb. Photo provided by Dr. Hodny, Inst. of Experimental Medicine, Prague, Czech Republic