Technical Data Sheet

FITC Mouse Anti-p53 Set

Product Information

Material Number: 557026 Size: 100 tests

QC Testing: Human Reactivity:

Tested in Development: Mouse, Rat

Component: 51-14214X

Description: FITC Mouse Anti-p53 Size: 100 tests (1 ea)

Vol. per Test: 20 µl G59-12 Clone Name:

Immunogen: Recombinant full-length human p53

Isotype:

Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

51-13854X-7 Component:

Description: FITC Mouse IgG1, κ Isotype Control

Size: 100 tests (1 ea) Vol. per Test: 20 μl Clone Name: MOPC-21

Aqueous buffered solution containing BSA and ≤0.09% sodium azide. Storage Buffer:

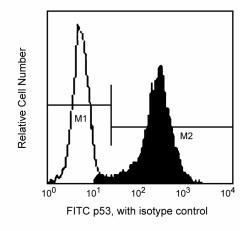
Mouse IgG1, κ

Description

Isotype:

p53 is a 53 kDa nuclear phosphoprotein that acts as a tumor suppressor protein, and is involved in inhibiting cell proliferation when DNA damage occurs. The gene for p53 is the most commonly mutated gene yet identified in human cancers. Missense mutations occur in tumors of the colon, lung, breast, ovary, bladder and several other organs. The mutant p53 is overexpressed in a variety of transformed cells and wildtype p53 forms specific complexes with several viral oncogenes including SV40 large T, E1b from adenovirus, and E6 from human papilloma virus. Wildtype p53 plays a role as a checkpoint protein for DNA damage during the G1/S-phase of the cell cycle.

Clone G59-12 recognizes mutant and wild type human, mouse, and rat p53 tumor suppressor protein. Recombinant full-length human p53 was used as immunogen. The G59-12 clone was originally characterized by western blot analysis, immunoprecipitation and immunohistochemical staining. MOPC-21 antibody has unknown specificity. The G59-12 and MOPC-21 FITC conjugates are matched in F/P ratios determined experimentally by flow cytometric analysis.



Profile of permeabilized HT-29 colon adenocarcinoma cells analyzed on a FACScan™ (BDIS, San Jose, CA). Cells were stained with anti-p53 FITC (clone G59-12) or with a mouse IgG1 isotype control.

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Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed.

Application Notes

Application

Intracellular staining (flow cytometry)

Routinely Tested

Recommended Assay Procedure:

Positive control cell lines include SK-BR-3 human breast carcinoma cells (ATCC HTB-30) and A431 human epidermal carcinoma cells (ATCC CRL-1555). Jurkat human T (leukemia) cells (ATCC TIB-152) or MCF-7 human breast carcinoma cells (ATCC HTB-22) are suggested as negative controls.

Product Notices

- 1. This antibody has been optimized and preassayed with its matched isotype control to be used at the recommended volume of 20 ul/test. Titration of the reagents or substituting with other (non-matched) isotype control is NOT recommended.
- Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
- 3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
- Species testing during development may have been performed with a different format of the same clone. Selected applications have been tested for cross-reactivity.
- For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
- Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

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Vojtesek B, Bartek J, Midgley CA, Lane DP. An immunochemical analysis of the human nuclear phosphoprotein p53. New monoclonal antibodies and epitope mapping using recombinant p53. J Immunol Methods. 1992; 151(1-2):237-244. (Biology)

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