Technical Data Sheet

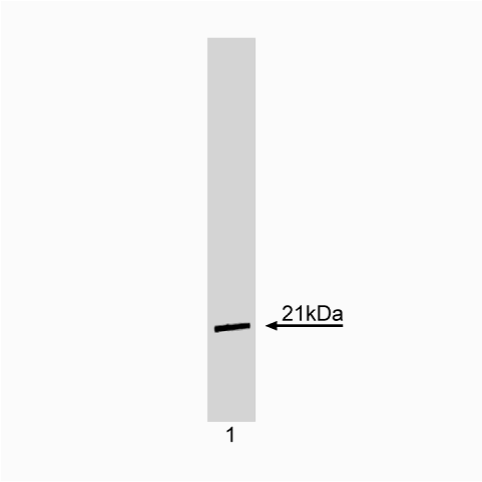
Purified Mouse Anti-Human p21

Product Information

Material Number:	**554228**
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	6B6
Immunogen:	Human p21
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human
Target MW:	21 kDa
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

p21 belongs to a class of tumor suppressors including p16 and p27 which control progression through the cell cycle by inhibiting the activity of cyclin-cdk complexes. p21 is also known as senescent cell-derived inhibitor 1 (Sdi1), wild-type p53-activated fragment 1 (Waf1), Cdk-interacting protein 1 (Cip1), p21 and p53-regulated inhibitor of Cdks (Pic1). p21 mRNA is expressed at higher levels in senescent fibroblasts than in actively growing cells. When introduced into proliferating foreskin fibroblasts, p21 inhibits DNA synthesis and cell cycle arrest. p53 can activate p21 gene expression via a p53 binding site identified in the promoter of the p21 gene.



Western blot analysis of p21. *Lysate from MCF7 breast carcinoma cells was probed with anti-human p21 (Cat. No. 15091A).*

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at 4°C.

Application Notes

Application

Western blot	Routinely Tested
Immunohistochemistry-frozen	Tested During Development
Immunohistochemistry-paraffin	Tested During Development
Immunoprecipitation	Tested During Development

Recommended Assay Procedure:

Applications include immunoprecipitation (1-2 µg/1x106 cells), western blot analysis (1-2 µg/ml) and immunohistochemistry of paraformaldehyde-fixed cultured cells (0.5-2.5 µg/ml) and acetone-fixed, frozen and formalin-fixed paraffin-embedded (10 µg/ml) tissue sections. MCF7 human breast carcinoma cells (ATCC HTB-22) are suggested as a positive control. WI-38 human lung fibroblasts (ATCC CCL-75) treated with doxorubin (Adriamycin) can also be used as a positive control.

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Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. 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.

References

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