Technical Data Sheet

Purified Mouse Anti-Human p73

Product Information

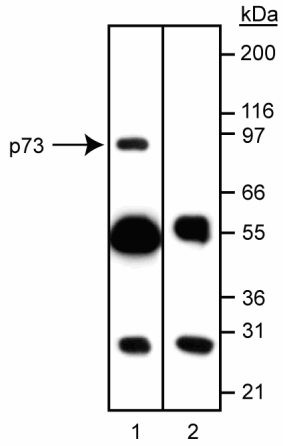
Material Number:	**558785**
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	ER-15
Immunogen:	Human p73α:GST fusion protein aa. 380-367
Isotype:	Mouse IgG1 κ
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

p53 is a tumor suppressor which acts as an S-phase checkpoint for DNA damage. The gene for p53 is the most commonly mutated gene identified in human cancers. Recently, a new member of the p53 family, p73, has been identified. p73 is structurally homologous to p53 in several regions, including the p53 N-terminal transactivation domain and C-terminal oligomerization domains, as well as the region corresponding to the p53 DNA-binding domain. p73, when overexpressed, can promote p53-like functions, including induction of apoptosis and induction of transcription from p53-responsive promoters such as p21. Despite structural and apparent functional homology, data suggests that these proteins may have distinct functions as well. For example, viral oncoproteins such as Adenovirus E1B 55k and HPV E6, which bind to and thus inactivate p53 during the process of transformation, do not bind to p73. In addition, unlike p53, p73 expression is not induced by DNA damage, i.e., UV irradiation. Several p73 splice variants have been identified, including α (full length), β (missing exon 13), γ (missing exon 11) and δ (missing exons 11, 12, and 13). Two hybrid analysis has shown variable interaction(s) between these isoforms in vitro. Many types of normal, tumor and virally-transformed cell lines express detectable levels of p73; however, the relative expression of p73 isoforms, as well as their functional activity, appears to be differentially regulated in various cell types. p73 alpha and beta isoforms migrate at molecular weights of 80 kD (alpha), 70 kD (beta), respectively.

The ER-15 antibody reacts with human p73α and β.

This antibody is routinely tested by western blot analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



Western blot analysis of p73. *Lysate from 293 human embryonic kidney cells was probed with anti-p73 (clone ER-15, Cat. No. 558785). Clone ER-15 identifies p73.*

Preparation and Storage

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

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Application Notes

Application

Immunoprecipitation	Reported
Western blot	Routinely Tested

Recommended Assay Procedure:

For western blot analysis use 0.5-2 µg/ml. Detailed protocol is available at: http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml. Human cell lines including 293 adenovirus-transformed kidney cells (ATCC CRL-1573) and cos-7 SV-40 transformed monkey kidney (ATCC CRL-1651) cell lines are recommended as positive controls.

Product Notices

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

References

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