Datasheet for ABIN967392

anti-MLH1 antibody

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Overview

Quantity:	0.1 mg
Target:	MLH1
Reactivity:	Human, Mouse
Host:	Mouse
Clonality:	Monoclonal
Application:	Western Blotting (WB), Immunoprecipitation (IP)

Product Details

Brand:	BD Pharmingen™
Immunogen:	Recombinant Human MLH
Clone:	G168-728
Isotype:	IgG2a kappa
Cross-Reactivity:	Mouse (Murine)
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us 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.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Target Details

Target:	MLH1
Alternative Name:	MLH1 (MLH1 Products)
Background:	The repair of mismatched DNA is essential to maintaining the integrity of genetic information over time. Loss of function of DNA repair enzymes can lead to an accumulation of replication errors, resulting in a mutated phenotype. DNA repair enzymes are highly conserved from bacteria to yeast to mammals. In yeast the proteins are called MutS homolog 2 (MSH2), MutL homolog (MLH1), and PMS1 which is also a homolog of MutL. MSH2 is involved in the initial recognition of mismatched nucleotides during the replication mismatch repair process. It is thought that after MSH2 binds to a mismatched DNA duplex, it is joined by a heterodimer of MLH1 and PMS1 which together help facilitate the later steps in mismatch repair. The G168-728 antibody recognizes human and mouse MLH1 (80-85 kDa). Full-length human recombinant MLH was expressed as a maltose binding-MLH fusion protein, affinity purified, and used as immunogen.
Molecular Weight:	80-85 kDa
Pathways:	DNA Damage Repair, Production of Molecular Mediator of Immune Response

Application Details

Application Notes:	Applications include immunoprecipitation (2 µg/1x106 cells) and western blot analysis (1-3 µg/ml). MCF-7 human breast carcinoma (ATCC HTB-22), 293 adenovirustransformed human kidney (ATCC CRL-1673), and NIH/3T3 mouse fibroblast (ATCC CRL-1658) cells are suggested as positive controls. Clone G168-15 is suggested for immunohistochemical analysis of MLH1, clone G168-15 may also be stronger for western blot analysis than clone G168-728 in some assay systems.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	0.5 mg/mL
Buffer:	Aqueous buffered solution containing ≤0.09 % 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

Storage:	4 °C
Storage Comment:	Store undiluted at 4° C.

Publications

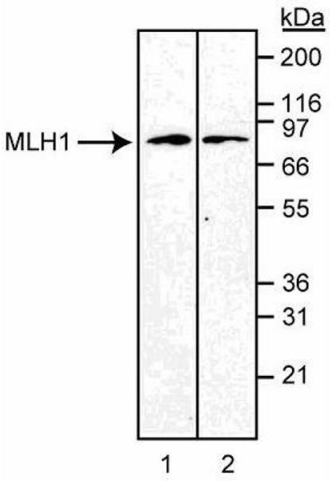
Product cited in:

Leitinger, Kwan: "The discoidin domain receptor DDR2 is a receptor for type X collagen." in: **Matrix biology : journal of the International Society for Matrix Biology**, Vol. 25, Issue 6, pp. 355-64, (2006) (PubMed).

Shyu, Chao, Wang, Kuan: "Regulation of discoidin domain receptor 2 by cyclic mechanical stretch in cultured rat vascular smooth muscle cells." in: **Hypertension**, Vol. 46, Issue 3, pp. 614-21, (2005) (PubMed).

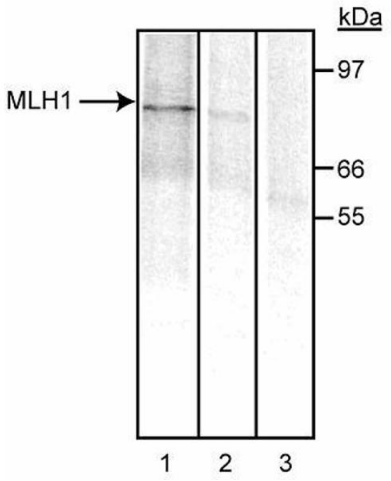
Neale, Kenny, Gershwin: "Cloning and sequencing of protein kinase cDNA from harbor seal (Phoca vitulina) lymphocytes." in: **Clinical & developmental immunology**, Vol. 11, Issue 2, pp. 157-63, (2004) (PubMed).

Images



Western Blotting

Image 1. Western blot analysis of MLH1. 30 myg of 293 cell lysate per lane was probed with 3 myg/ml (lane 1) or 1 myg/ml (lane 2) of anti- MLH1 antibody (clone G168-728).



Immunoprecipitation

Image 2. Immunoprecipitation of MLH1. Two different monoclonal antibodies were used to immunoprecipitate MLH1 from equal amounts of whole cell extracts of NIH/3T3 mouse cells. Lane 1, a strong MLH1 band was seen with clone G168-728. Lane 2, only a faint band was seen using clone G168-15. Lane 3, an IgG2a isotype control.

Image 3.

Please check the product details page for more images. Overall 4 images are available for ABIN967392.