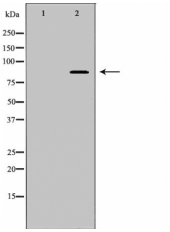
MLH1 Ab

Cat.#: DF6057	Concn.: 1mg/ml	Mol.Wt.: 85kDa
Size: 100ul,200ul	Source: Rabbit	Clonality: Polyclonal

Application:	WB 1:500-1:2000, IF/ICC 1:100-1:500
Reactivity:	Human,Mouse,Rat
Purification:	The antiserum was purified by peptide affinity chromatography using SulfoLink™ Coupling Resin (Thermo Fisher Scientific).
Specificity:	MLH1 Ab detects endogenous levels of total MLH1.
Immunogen:	A synthesized peptide derived from human MLH1.
Uniprot:	P40692
Description:	Mismatch repair (MMR), a conserved process that involves correcting errors made during DNA synthesis, is crucial to the maintenance of genomic integrity. MLH1 is the human homologue of the E. coli MMR gene mutL. MMR requires recognition of a base mismatch or insertion/deletion loop by a MutS homolog followed by recruitment of a MutLheterodimeric complex consisting of MLH1 and PMS1 (MutL-α), PMS2 (MutL-β) or MLH3 (MutL-γ). Other factors required for MMR in eukaryotes are EXO1, PCNA, RFC, RPA, DNA polymerases and DNA ligase (reviewed in 1). Inactivation of the MLH1 gene causes genome instability and predisposition to cancer (2-5). The MLH1 gene is frequently mutated in hereditary nonpolyposis colon cancer (HNPCC) (6). MLH1 also plays a role in meiotic recombination (7).
Subcellular Location:	Nucleus.
Tissue Specificity:	Colon, lymphocytes, breast, lung, spleen, testis, prostate, thyroid, gall bladder and heart.
Similarity:	Belongs to the DNA mismatch repair MutL/HexB family.
Storage Condition and Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt.



Western blot analysis of HepG2 cell lysates, using MLH1 Ab. The lane on the left was treated with the antigen-specific peptide.

DF6057 staining HepG2 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100,then blocked in 10% serum for 45 minutes at 25°C. The primary Ab was diluted at 1/200 and incubated with the sample for 1 hour at 37°C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary Ab.

IMPORTANT: For western blot, incubate membrane with diluted primary Ab in 5% w/v milk , 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.