For Research Use Only

EZH2 Recombinant monoclonal antibody

Catalog Number:84824-2-RR



Basic Information

Catalog Number: 84824-2-RR Source:

Rabbit Isotype: IgG

Immunogen Catalog Number:

AG16789

GenBank Accession Number:

BC010858
GeneID (NCBI):
2146
UNIPROT ID:
Q15910
Full Name:

enhancer of zeste homolog 2 (Drosophila) Calculated MW:

751 aa, 86 kDa Observed MW: 90-102 kDa Purification Method:

Protein A purification

CloneNo.: 242309F11

Recommended Dilutions: WB: 1:1000-1:8000 IHC: 1:250-1:1000 IF/ICC: 1:250-1:1000 ChIP-qPCR: 1:10-1:100

Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA, ChIP-qPCR

Species Specificity: human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 Positive Controls:

WB: Jurkat cells, Raji cells, NIH/3T3 cells, C6 cells

IHC: human liver cancer tissue,

IF/ICC : HepG2 cells,
ChIP-qPCR : NCCIT cells,

Background Information

EZH2 (enhancer of zeste homologue 2, also known as KMT6) is a member of Polycomb group (PcG) family and encodes a histone methyl transferase that has an essential role in promoting histone H3 lysine 27 trimethylation (H3K27me3) and epigenetic gene silencing. EZH2 is important for cell proliferation and inhibition of cell differentiation, and is implicated in cancer progression. Overexpression of EZH2 is a marker of advanced and metastatic disease in many solid tumors, including prostate and breast cancer. This antibody detected EZH2 protein as a single band with a molecular weight (MW) of 91-100 kDa in multiple cell lines. The phosphorylation may result in the higher molecular weight (calculated MW as 80-86 kDa). (20935635, 21367748)

Storage

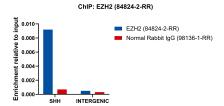
Storage

Store at -20°C. Stable for one year after shipment. Storage Buffer:

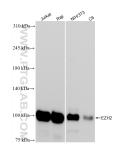
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Chromatin was prepared from NCCIT cells. Cells were fixed with formaldehyde for 10 minutes. The ChIP was performed with 20 µg of cross-linked chromatin, 5 µg of EZH2 (84824-2-RR) or 5 µg of Normal Rabbit IgG (98136-1-RR), and 20 µl of Protein A Magarose Beads. The immunoprecipitated DNA was quantified by real-time PCR.



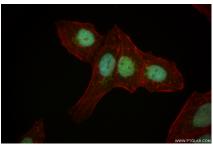
Various lysates were subjected to SDS PAGE followed by western blot with 84824-2-RR (EZH2 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 84824-2-RR (EZH2 antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using EZH2 antibody (84824-2-RR, Clone: 242309F11) at dilution of 1:500 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).

Biolayer interferometry (BLI) kinetic assays of 84824-2-RR against Human EZH2 were performed. The affinity constant is 2.73 nM.