Anti-HP1 alpha Mouse mAb

Purified Recombinant Mouse Monoclonal Antibody

Catalog # M012702

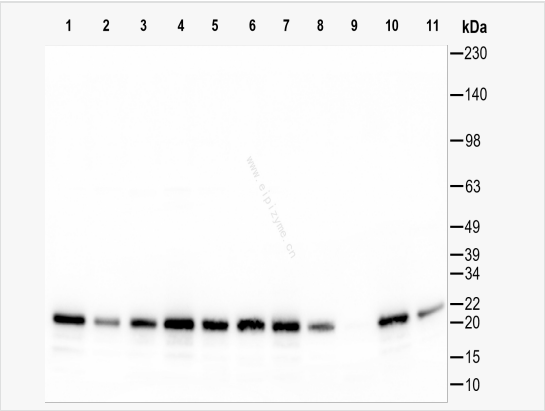
Product Information

Application	WB, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:2,000
Host	Mouse
Clonality	Monoclonal
Clone No.	33L86L07
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant protein of human HP1 alpha
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-HP1 alpha Mouse mAb [33L86L07] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Synonyms	HEL25; HP1; HP1A; HP1alpha; 2610029O15Rik; CBX5_HUMAN; CBX5; Antigen p25; Heterochromatin protein 1 homolog alpha (HP1 alpha); CBX5_MOUSE.
Calculated MW	Calculated MW: 22 kDa; Observed MW: 22 kDa
Uniprot ID	P45973
Gene ID	23468
Background	This gene encodes a highly conserved nonhistone protein, which is a member of the heterochromatin protein family. The protein is enriched in the heterochromatin and associated with centromeres. The protein has a single N-terminal chromodomain which can bind to histone proteins via methylated lysine residues, and a C-terminal chromo shadow-domain (CSD) which is responsible for the homodimerization and interaction with a number of chromatin-associated nonhistone proteins. The encoded product is involved in the formation of functional kinetochore through interaction with essential kinetochore proteins. The gene has a pseudogene located on chromosome 3. Multiple alternatively spliced variants, encoding the same protein, have been identified. [provided by RefSeq, Jul 2008]
Cellular Location	Nucleus Chromosome Chromosome Centromere Colocalizes with HNRNPU in the nucleus (PubMed:19617346). Component of centromeric and pericentromeric heterochromatin. Associates with chromosomes during mitosis. Associates specifically with chromatin during metaphase and anaphase (PubMed:19617346). Localizes to sites of DNA damage (PubMed:28977666).

Validation Images



Western Blot - Anti-HP1 alpha Mouse mAb [33L86L07]
All lanes: M012702 at 1:1,000 dilution
Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates
Lane 2: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates
Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates
Lane 4: MCF-7 (human breast adenocarcinoma epithelial cell) whole cell lysates
Lane 5: 293T (Human embryonic kidney cell) whole cell lysates
Lane 6: U87 (Human malignant glioblastoma epithelial cells) whole cell lysates
Lane 7: C2C12 (Mouse myoblasts epithelial cell) whole cell lysates
Lane 8: Mouse brain whole tissue lysates
Lane 9: Mouse liver whole tissue lysates
Lane 10: PC-12 (Rat adrenal pheochromocytoma epithelial cell) whole cell lysates
Lane 11: Rat brain whole tissue lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Mouse IgG(H+L), HRP Conjugated (Cat. No. LF101) at 1:5,000 dilution
Predicted band size: 22 kDa
Observed band size: 22 kDa
Developed using the ECL technique (Cat. No. SQ201).