10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

H1FOO Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17183c

Product Information

Application	WB, E
Primary Accession	Q8IZA3
Other Accession	NP_722575.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB36665
Calculated MW	35813
Antigen Region	138-167

Additional Information

Gene ID	132243
Other Names	Histone H1oo, Oocyte-specific histone H1, Oocyte-specific linker histone H1, osH1, H1FOO, H1OO, OSH1
Target/Specificity	This H1FOO antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 138-167 amino acids from the Central region of human H1FOO.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	H1FOO Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	H1-8 (HGNC:18463)
Function	May play a key role in the control of gene expression during oogenesis and early embryogenesis, presumably through the perturbation of chromatin structure. Essential for meiotic maturation of germinal vesicle-stage oocytes.

	The somatic type linker histone H1c is rapidly replaced by H1oo in a donor nucleus transplanted into an oocyte. The greater mobility of H1oo as compared to H1c may contribute to this rapid replacement and increased instability of the embryonic chromatin structure. The rapid replacement of H1c with H1oo may play an important role in nuclear remodeling (By similarity).
Cellular Location	Cytoplasm. Nucleus {ECO:0000255|PROSITE-ProRule:PRU00837}. Chromosome {ECO:0000255|PROSITE-ProRule:PRU00837}
Tissue Location	Oocyte-specific..

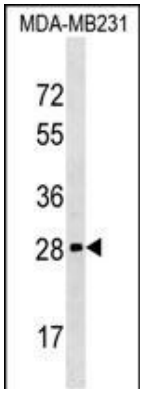
Background

Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Nucleosomes consist of approximately 146 bp of DNA wrapped around a histone octamer composed of pairs of each of the four core histones (H2A, H2B, H3, and H4). The chromatin fiber is further compacted through the interaction of a linker histone, H1, with the DNA between the nucleosomes to form higher order chromatin structures. The protein encoded is a member of the histone H1 family. This gene contains introns, unlike most histone genes. The protein encoded is a member of the histone H1 family. The related mouse gene is expressed only in oocytes.

References

Mizusawa, Y., et al. Fertil. Steril. 93(4):1134-1141(2010)
Tanaka, M., et al. Biol. Reprod. 72(1):135-142(2005)
Teranishi, T., et al. Dev. Biol. 266(1):76-86(2004)
Gao, S., et al. Dev. Biol. 266(1):62-75(2004)
Tanaka, Y., et al. Biochem. Biophys. Res. Commun. 304(2):351-357(2003)

Images



H1FOO Antibody (Center) (Cat. #AP17183c) western blot analysis in MDA-MB231 cell line lysates (35ug/lane).This demonstrates the H1FOO antibody detected the H1FOO protein (arrow).