

Product datasheet for **TA420186**

HISTIH3F Rat Monoclonal Antibody [Clone ID: 2G1F9]

Product data:

Product Type:	Primary Antibodies
Clone Name:	2G1F9
Applications:	Ch, IF, WB
Reactivity:	Broad
Host:	Rat
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	A peptide containing acetyl-lysine 9 of human histone H3
Specificity:	HISTONE H3 (Ac9)
Formulation:	Phosphate buffered saline containing 0.035% Sodium Azide (NaN ₃)30% Glycerol Label: Purified State: Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant Purified IgG - liquid
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	+4°C, -20°C if preferred
Stability:	Shelf life: one year from despatch.
Gene Name:	histone cluster 1, H3f
Database Link:	P68431



Background:

Rat anti Human histone H3 (Ac9) antibody, clone 2G1F9 recognizes histone H3 when acetylated at lysine 9. Histone H3 is one of the four core histones that make up the nucleosome core particle. Nucleosomes are the smallest subunit of chromatin and are made up of 146 bp of DNA wrapped around an octamer comprised of pairs of the four core histones (H2A, H2B, H3, and H4) (Smith, 1991). Lysine residues within the N-terminal tail protruding from the histone core of the nucleosome are acetylated and deacetylated as part of gene regulation. Hyperacetylation of histone tails makes chromatin more accessible to DNA-binding proteins by weakening histone-DNA and nucleosome-nucleosome interactions (Kuo and Allis, 1998). Acetylation of histone H3 at lysine 4 usually leads to the transcriptional activation of genes (Hazzlin and Mahadevan, 2005). Wide species cross-reactivity is expected from Rat anti Human histone H3 (Ac9) antibody based on sequence.

Synonyms:

H3/a; H3/b; H3/c; H3/d; H3/f; H3/h; H3/i; H3/j; H3/k; H3/l; H3FA; H3FB; H3FC; H3FD; H3FF; H3FH; H3FI; H3FJ; H3FK; H3FL