

# Anti-Histone H3.3 S28 antibody

Clone	Cross reactivity	Application notes	Host	Isotype	Storage
5G12G3	Mammals	WB, ICC, ChIP	Mouse	IgG2b, $\kappa$	-20°C

**BACKGROUND** : Nucleosomes are composed of four different histone proteins, designated H3, H4, H2A, and H2B. Histone H3 has two main variants, H3.1 and H3.3, which show different genomic localization patterns in eukaryotes. Histone H3.3 serves as the replacement variant for the DNA-synthesis-independent deposition pathway.

Post-translation modifications of histones modulate the accessibility and transcriptional competence of specific chromatin regions within the eukaryotic genome. Phosphorylation of histone H3 is unique in the sense that it associates on one hand with open chromatin during gene activation and marks on the other hand highly condensed chromatin during mitosis.

**Immunogen** Synthetic peptide corresponding to N-terminus region Ser28ph (aa 21-39) of human Histone H3.3, ATKAARK(phS)APSTGGVKKPH

**Host** Mouse  
**Isotype** IgG2b,  $\kappa$   
**Cross reactivity** Mammals

**Specificity** Histone H3.3 S28ph

**Application notes** Recommended use  
ELISA, WB, ICC, ChIP  
Recommended dilutions  
Western blotting, 1/1000 to 1/5000  
Immunocytochemistry, 1/100 to 1/500

Optional dilutions/concentrations should be determined by the end user.

**Source** Culture Supernatant

**Purification** Ion-exchange chromatography

**Form** Liquid

**Presentation** Purified monoclonal antibody in PBS, 50% Glycerol, 0.05% w/v ProClin300

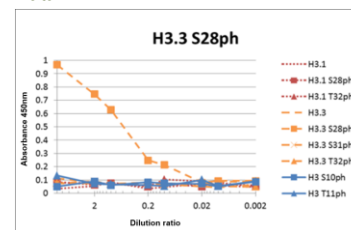
**Concentration** 0.5 mg/mL

**Volume** 200  $\mu$ L

**Storage** Store below -20°C  
(below -70°C for prolonged storage)  
Aliquot to avoid cycles of freeze/thaw.

**References** 1) Yoshimi et al., (2013) Monoclon Antib Immunodiagn Immunother, 32, 119-124  
This antibody is used in ref.1.

## Data



H3.1	21	ATKAARKS	APAT	GGVKKPH	39
H3.1 S28ph	21	ATKAARKS	phAPAT	GGVKKPH	39
H3.1 T32ph	21	ATKAARKS	APAT	phGGVKKPH	39
H3.3	21	ATKAARKS	APST	GGVKKPH	39
H3.3 S28ph	21	ATKAARKS	phAPST	GGVKKPH	39
H3.3 S31ph	24	AARKS	phTGGVKK	37	
H3.3 T32ph	21	ATKAARKS	phGGVKKPH	39	
H3 S10ph	1	ARTKQTARKS	phTGGKAPRKQ	19	
H3 T11ph	1	ARTKQTARKS	phGGKAPRKQ	19	

Fig.1 ELISA analysis  
- Histone H3.3 S28ph antibody (5G12G3)



Fig.2 Western blot  
- Histone H3.3 S28ph antibody (5G12G3)  
the treated-cell extracts

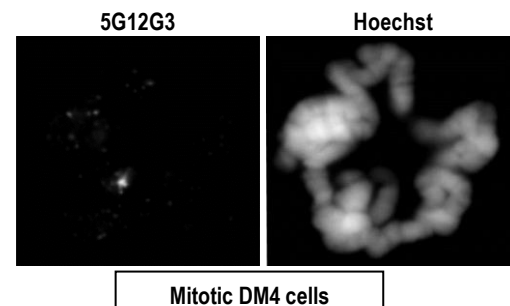


Fig.3 Immunocytochemistry/Immunofluorescence  
- Histone H3.3 S28ph antibody (5G12G3)  
DM4 cells