PADI4 Rabbit pAb

Swiss-Prot No.:	Q9UM07
Altername:	PADI4
Storage/Stability:	Store at -20°C. Avoid freeze / thaw cycles.
lmmunogen:	Recombinant fusion protein containing a sequence corresponding to amino acids 374-550 of human PADI4 (NP_036519.2).
Purification:	Affinity purified
Reactivity:	Human
Other Names:	PAD; PAD4; PDI4; PDI5; PADI5
Cellular localization:	Cytoplasm, Nucleus
Relevance:	Catalyzes the citrullination/deimination of arginine residues of proteins such as histones, thereby playing a key role in histone code and regulation of stem cell maintenance. Citrullinates histone H1 at 'Arg-54' (to form H1R54ci), histone H3 at 'Arg-2', 'Arg-8', 'Arg-17' and/or 'Arg-26' (to form H3R2ci, H3R8ci, H3R17ci, H3R26ci, respectively) and histone H4 at 'Arg-3' (to form H4R3ci). Acts as a key regulator of stem cell maintenance by mediating citrullination of histone H1: citrullination of 'Arg-54' of histone H1 (H1R54ci) results in H1 displacement from chromatin and global chromatin decondensation, thereby promoting pluripotency and stem cell

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	maintenance. Promotes profound chromatin decondensation during the innate immune response to infection in neutrophils by mediating formation of H1R54ci. Citrullination of histone H3 prevents their methylation by CARM1 and HRMT1L2/PRMT1 and represses transcription. Citrullinates EP300/P300 at 'Arg-2142', which favors its interaction with NCOA2/GRIP1.
Source:	Rabbit
Antibody type:	Polyclonal antibody
Isotype:	Rabbit IgG
Molecular Weight:	74kDa
Preservative:	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Recommended Dilutions:	WB 1:500 - 1:2000(Optimal dilutions should be determined by the end user)