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SGF29 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5140b

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q96ES7
Other Accession	P0C606, Q9DA08, Q5ZL38
Reactivity	Human
Predicted	Chicken, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB26232
Calculated MW	33238
Antigen Region	179-208

Additional Information

Gene ID	112869
Other Names	SAGA-associated factor 29 homolog, Coiled-coil domain-containing protein 101, CCDC101, SGF29
Target/Specificity	This SGF29 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 179-208 amino acids from the C-terminal region of human SGF29.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 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	SGF29 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SGF29 (HGNC:25156)
Function	Chromatin reader component of some histone acetyltransferase (HAT)

SAGA-type complexes like the TFTC-HAT, ATAC or STAGA complexes (PubMed:19103755, PubMed:20850016, PubMed:21685874, PubMed:26421618, PubMed:26578293). SGF29 specifically recognizes and binds methylated 'Lys-4' of histone H3 (H3K4me), with a preference for trimethylated form (H3K4me3) (PubMed:20850016, PubMed:21685874, PubMed:26421618, PubMed:26578293). In the SAGA-type complexes, SGF29 is required to recruit complexes to H3K4me (PubMed:20850016). Involved in the response to endoplasmic reticulum (ER) stress by recruiting the SAGA complex to H3K4me, thereby promoting histone H3 acetylation and cell survival (PubMed:23894581). Also binds non-histone proteins that are methylated on Lys residues: specifically recognizes and binds CGAS monomethylated on 'Lys-506' (By similarity).

Cellular Location Nucleus {ECO:0000250|UniProtKB:P0C606}.

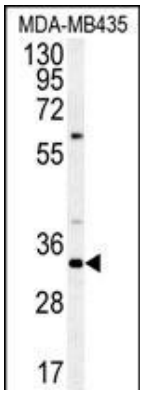
Background

CCDC101 is a subunit of 2 histone acetyltransferase complexes: the ADA2A (TADA2A; MIM 602276)-containing (ATAC) complex and the SPT3 (SUPT3H; MIM 602947)-TAF9 (MIM 600822)-GCN5 (KAT2A; MIM 602301)/PCAF (KAT2B; MIM 602303) acetylase (STAGA) complex. Both of these complexes contain either GCN5 or PCAF, which are paralogous acetyltransferases.

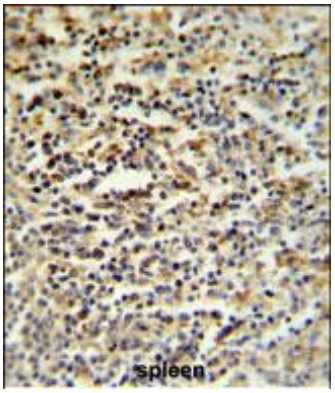
References

Imielinski, M., et al. Nat. Genet. 41(12):1335-1340(2009)
Wang, Y.L., et al. J. Biol. Chem. 283(49):33808-33815(2008)

Images

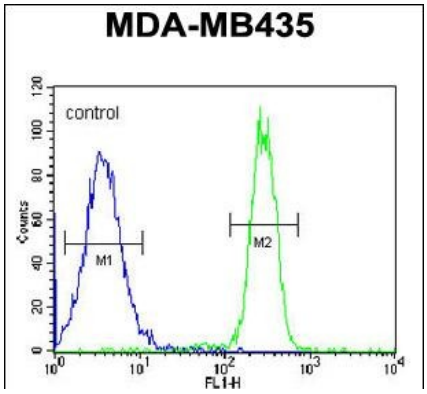


Western blot analysis of SGF29 Antibody (C-term) (Cat. #AP5140b) in MDA-MB435 cell line lysates (35ug/lane).SGF29 (arrow) was detected using the purified Pab.



SGF29 Antibody (C-term) (Cat. #AP5140b) IHC analysis in formalin fixed and paraffin embedded human spleen tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the SGF29 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

SGF29 Antibody (C-term) (Cat. #AP5140b) flow cytometric analysis of MDA-MB435 cells (right histogram) compared



to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.