

SGF29 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5140b

Specification

SGF29 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region FC, IHC-P, WB,E <u>O96ES7</u> <u>P0C606</u>, <u>O9DA08</u>, <u>O5ZL38</u> Human Chicken, Mouse, Rat Rabbit Polyclonal Rabbit IgG 33238 179-208

SGF29 Antibody (C-term) - 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 FC~~1:10~50 IHC-P~~1:50~100 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

SGF29 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SGF29 Antibody (C-term) - 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:<u>19103755</u>, PubMed:<u>20850016</u>, PubMed:<u>21685874</u>, PubMed:<u>26421618</u>, PubMed:<u>26578293</u>). SGF29 specifically recognizes and binds methylated 'Lys-4' of histone H3 (H3K4me), with a preference for trimethylated form (H3K4me3) (PubMed:<u>20850016</u>, PubMed:<u>21685874</u>, PubMed:<u>26421618</u>, PubMed:<u>26578293</u>). In the SAGA-type complexes, SGF29 is required to recruit complexes to H3K4me (PubMed:<u>20850016</u>). 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:<u>23894581</u>). 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}.

SGF29 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- <u>Cell Culture</u>

SGF29 Antibody (C-term) - 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.

SGF29 Antibody (C-term) - 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.

SGF29 Antibody (C-term) - 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)