

# Product datasheet for TA384587S

## KAT2A Rabbit Monoclonal Antibody [Clone ID: R05-2C1]

### **Product data:**

#### OriGene Technologies, Inc.

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Product Type:	Primary Antibodies
Clone Name:	R05-2C1
Applications:	IP, WB
Recommended Dilution:	WB: 1/1000 IP: 1/20
Reactivity:	Human
Host:	Rabbit
lsotype:	IgG
Clonality:	Monoclonal
Immunogen:	Recombinant protein of human GCN5
Formulation:	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA
Concentration:	lot specific
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Stability:	1 year
Predicted Protein Size:	Calculated MW: 94 kDa; Observed MW: 94 kDa
Gene Name:	lysine acetyltransferase 2A
Database Link:	<u>Entrez Gene 2648 Human</u> <u>Q92830</u>



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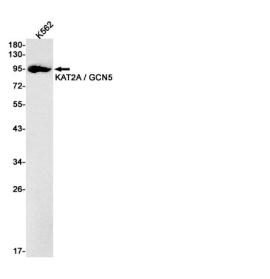
#### CRIGENE KAT2A Rabbit Monoclonal Antibody [Clone ID: R05-2C1] – TA384587S

Background: Swiss-Prot Acc.Q92830.Protein lysine acyltransferase that can act both as a acetyltransferase and succinyltransferase, depending on the context (PubMed:29211711). Acts as a histone lysine succinyltransferase: catalyzes succinylation of histone H3 on 'Lys-79' (H3K79succ), with a maximum frequency around the transcription start sites of genes (PubMed:29211711). Succinvlation of histones gives a specific tag for epigenetic transcription activation (PubMed:29211711). Association with the 2-oxoglutarate dehydrogenase complex, which provides succinyl-CoA, is required for histone succinylation (PubMed:29211711). In different complexes, functions either as an acetyltransferase (HAT) or as a succinyltransferase: in the SAGA and ATAC complexes, acts as a histone acetyltransferase (PubMed:17301242, PubMed:19103755, PubMed:29211711). Has significant histone acetyltransferase activity with core histones, but not with nucleosome core particles (PubMed:17301242, PubMed:19103755). Acetylation of histones gives a specific tag for epigenetic transcription activation (PubMed:17301242, PubMed:19103755, PubMed:29211711). Involved in long-term memory consolidation and synaptic plasticity: acts by promoting expression of a hippocampal gene expression network linked to neuroactive receptor signaling . Acts as a positive regulator of T-cell activation: upon TCR stimulation, recruited to the IL2 promoter following interaction with NFATC2 and catalyzes acetylation of histone H3 at Lys-9 (H3K9ac), leading to promote IL2 expression . Also acetylates non-histone proteins, such as CEBPB, PLK4 and TBX5 (PubMed:17301242, PubMed:29174768, PubMed:27796307). Involved in heart and limb development by mediating acetylation of TBX5, acetylation regulating nucleocytoplasmic shuttling of TBX5 (PubMed:29174768). Acts as a negative regulator of centrosome amplification by mediating acetylation of PLK4 (PubMed:27796307).

Synonyms:

GCN5; GCN5L2; HGCN5; hsGCN5; MGC102791; PCAF-b; STAF97

#### **Product images:**



Western blot analysis of KAT2A / GCN5 in K562 lysates using KAT2A antibody.

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