

# Datasheet for ABIN1423087

# anti-GNE antibody (Cy5.5)



#### Overview

Quantity:	100 μL
Target:	GNE
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This GNE antibody is conjugated to Cy5.5
Application:	Western Blotting (WB), Immunofluorescence (Paraffin-embedded Sections) (IF (p))

## **Product Details**

Immunogen:	KLH conjugated synthetic peptide derived from human GLCNE
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Purified by Protein A.

Target Details		
Target:	GNE	
Alternative Name:	GLCNE (GNE Products)	
Background:	Synonyms: IBM2, Uae1, Bunctional UDP N acetylglucosamine 2 epimerase/N acetylmannosamine kinase, DMRV, ManAc kinase, N acylmannosamine kinase, NM, RP23-209M8.6, UDP GlcNAc 2 epimerase, UDP GlcNAc 2 epimerase/ManAc kinase, Uridine diphosphate N acetylglucosamine 2 epimerase, GLCNE_HUMAN.	

Background: The bifunctional enzyme UDP-N-acetylglucosamine 2-epimerase/N-acetylmannosamine kinase (GNE/Mnk), or GLCNE, regulates and initiates biosynthesis of N-acetylneuraminic acid (NeuAc), a precursor of sialic acids. GLCNE is required for normal sialylation in hematopoietic cells. Sialylation is implicated in cell adhesion, signal transduction, tumorigenicity and metastatic behavior of malignant cells. It is upregulated after PKC-dependent phosphorylation and is most abundantly expressed in liver and placenta. It is also expressed, to a lesser extent, in heart, brain, lung, kidney, skeletal muscle and pancreas. Defects in GLCNE are the cause of sialuria, inclusion body myopathy 2 (IBM2) and Nonaka myopathy (NM) or distal myopathy with rimmed vacuoles (DMRV). Sialuria is an autosomal dominant disorder caused by a lack of feedback inhibition of GLCNE by CMP-NeuAc, resulting in overproduction of NeuAc. It is characterized by an accumulation of free sialic acid in the cytoplasm and large quantities of neuraminic acid in the urine. Both IBM2 and NM/DMRV are autosomal recessive neuromuscular disorders characterized by adult onset, distal and proximal muscle weakness (especially in the legs) and a typical muscle pathology including filamentous inclusions and rimmed vacuoles.

Gene ID:

10020

IF(IHC-P) 1:50-200

12 months

For Research Use only

## **Application Details**

**Application Notes:** 

Restrictions:

**Expiry Date:** 

Handling		
Format:	Liquid	
Concentration:	1 μg/μL	
Buffer:	Aqueous buffered solution containing 0.01M TBS (pH 7.4) with 1 % BSA, 0.03 % Proclin300 and 50 % Glycerol.	
Preservative:	ProClin	
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.	
Storage:	-20 °C	
Storage Comment:	Store at -20°C. Aliquot into multiple vials to avoid repeated freeze-thaw cycles.	