

## Guanidine hydrochloride

### Description

The product is the core raw material for nucleic acid extraction after strict screening and quality control. Guanidine hydrochloride is a powerful denaturant or ionizing agent, which can promote the solubility of hydrophobic molecules and denature proteins. It is also an effective denaturant and inactivator of a variety of enzymes and proteins. In 6 M guanidine hydrochloride solution, the ordered "secondary structure" (maintained by intermolecular non covalent interactions, such as hydrogen bonds and hydrophobic bonds) of almost all proteins is destroyed and the peptide chain is stretched. The tertiary structure has changed. In the process of nucleic acid extraction, guanidine hydrochloride is often used as cleaning solution (> 3M), binding solution (4 ~ 6m) for protein removal, and lysate for genomic DNA and total RNA extraction. Different from guanidine isothiocyanate, guanidine hydrochloride has low absorbance in a260, A280 and A230, and the ratio of nucleic acid product a260 / 230 is more ideal.

### Ordering Information

CAT.No.	Product Name	Package
C11101	Guanidine Hydrochloride	5KG
C11102	(Molecular Biology)	25KG(5KG/Bag, 5bags/Bucket)

### Specifications

Product Name	Guanidine Hydrochloride, Aminoformamidine hydrochloride, Aminomethanamidine hydrochloride	
Basic content	Recommended application	Plasmid extraction, lysis Solution or cleaning solution
	CAS Numbers	50-01-1
	Formula	CH5N3.HCL
	Molecular Weight	95.53
	content	99.5%
	level	Molecular Biology
	appearance	White crystal, will harden for a long time
	Transportation conditions	Room temperature
Preservation conditions	Room temperature, dry, dark	
Impurity parameters	Moisture	≤0.3%
	Ash	≤0.02%
	Water insoluble matter	≤0.02%
	ammonium	≤0.05%
	Ammonium dicyanide	≤0.1%
	Ammonium cyanuric chloride	≤0.01%
	iron	≤0.1 PPM
UV absorption value	Absorbance value @ 230 (6M)	≤0.4
	Absorbance value @ 260 (6M)	≤0.04
	Absorbance value @ 280 (6M)	≤0.01
	Absorbance value @ 320 (6M)	≤0.01
Nucleic acid extraction related	Plasmid extraction test	adopt
	Blood DNA extraction test	adopt
	DNase test (2M)	Not detected
	RNase test (2M)	Not detected
	Purity of saturated solution (8M)	The 8m mother liquor is heated and dissolved. After dissolution, the insoluble matter is filtered with 3 layers of rapid filter paper.
	PH value (6M)	5.0-5.5