

HEPES, 1M, Cell Culture Grade

#GTC14.0100 (100ml)

(FOR RESEARCH ONLY)



Product:	HEPES (N-2-hydroxyethylpiperazine-N-2-ethane sulfonic acid) is widely used as a buffering agent in cell culture media. The zwitterion possesses a $pK_{a(1)}$ of 3 and a $pK_{a(2)}$ of 7.5 with useful pH ranges of 2.5-3.5 and 6.7-8.6. In comparison with bicarbonate buffer systems, HEPES is better in maintaining physiological pH despite changes in CO_2 concentrations resulting from cellular activity. HEPES is suitable for many cell culture systems as it is membrane impermeable and has limited effect on biochemical reactions.
Quantity:	#GTC14.0100 comprises 100ml of cell culture grade 1M HEPES.
Applications:	Cell Culture.
Appearance:	Clear colourless solution.
Specifications:	Concentration: 238.30 g/L (1.00M) pH: 6.5-7.5 Osmolality: >1000 mOsm/kg Sterility: sterile Endotoxin: <0.05 EU/ml (at 25mM concentration)
Storage:	Shipped at room temperature, store at 2°C to 25°C.

Usage:

Add directly to cell culture media to a final concentration of 25-40mM