

CRYSTALLIZATION BUFFERS TABLE

Crystals of the human leukocyte Fc receptor, FcγRIIIa. Initial crystals grown from Crystal Screen reagent number 9.

Courtesy of Maree Powell.

The Austin Research Institute

DESCRIPTION

Tabled below are buffers typically used in creating buffered crystallization reagents. Buffers should be used in the indicated ranges.

BUFFER	pH												
	1	2	3	4	5	6	7	8	9	10	11	12	
ACES N-[2-Acetamido]-2-aminoethanesulfonic acid						6.1	7.5						
ADA N-[2-Acetamido]-2-iminodiacetic acid						6.0	7.2						
AMPSO 3-[(1,1-Dimethyl-2-hydroxyethyl)amino]-2-hydroxypropanesulfonic acid								8.3	9.7				
BES N,N-bis[2-Hydroxyethyl]-2-aminoethanesulfonic acid						6.4	7.8						
Bicine N,N-bis[2-Hydroxyethyl]glycine							7.6	9.0					
Bis-Tris bis[2-Hydroxyethyl]iminotris[hydroxymethyl]-methane					5.5	7.5							
Bis-Tris Propane 1,3-bis[tris(Hydroxymethyl)methylamino]propane						6.3	9.5						
CABS 4-[Cyclohexylamino]-1-butanesulfonic acid										10.0	11.4		
CAPS 3-[Cyclohexylamino]-1-propanesulfonic acid										9.7	11.1		
CAPSO 3-[Cyclohexylamino]-2-hydroxy-1-propanesulfonic acid									8.9	10.3			
CHES 2-[N-Cyclohexylamino]ethanesulfonic acid									8.6	10.0			
Citric Acid		2.2				6.5							
DIPSO 3-[N,N-bis(2-Hydroxyethyl)amino]-2-hydroxypropanesulfonic acid							7.0	8.2					
EPPS N-[2-Hydroxyethyl]piperazine-N'-[3-propanesulfonic acid; HEPPS							7.3	8.7					
Glycine N,N-bis(2-Hydroxyethyl)glycine									8.6	10.6			
HEPBS N-[2-Hydroxyethyl]piperazine-N'-[4-butanesulfonic acid]								7.6	9.0				
HEPES N-[2-Hydroxyethyl]piperazine-N'-[2-ethanesulfonic acid]							6.8	8.2					

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pH

BUFFER	1	2	3	4	5	6	7	8	9	10	11	12
HEPPSO N-[2-Hydroxyethyl]piperazine-N'-[2-hydroxypropanesulfonic acid]							7.1	8.5				
Imidazole						6.2	7.8					
MES 2-[N-Morpholino]ethanesulfonic acid					5.5	6.7						
MOBS 4-[N-Morpholino]butanesulfonic acid						6.9	8.3					
MOPS 3-[N-Morpholino]propanesulfonic acid						6.5	7.9					
MOPSO 3-[N-Morpholino]-2-hydroxypropanesulfonic acid						6.2	7.6					
PIPES Piperazine-N,N'-bis[2-ethanesulfonic acid]						6.1	7.5					
POPSO Piperazine-N,N'-bis[2-hydroxypropanesulfonic acid]							7.2	8.5				
Potassium Chloride	1.0	2.2										
Sodium Acetate			3.6	5.6								
Sodium Cacodylate				5.0	7.4							
Sodium Citrate			3.0	6.6								
Sodium HEPES N-[2-Hydroxyethyl]piperazine-N'-[2-ethanesulfonic acid] Sodium Salt						6.8	8.2					
Tris Tris(hydroxymethyl)aminomethane							7.0	9.0				
Tris Hydrochloride Tris(hydroxymethyl)aminomethane hydrochloride							7.0	9.0				
TABS N-tris[Hydroxymethyl]methyl-4-aminobutanesulfonic acid								8.2	9.6			
TAPS N-tris[Hydroxymethyl]methyl-3-aminopropanesulfonic acid								7.7	9.1			
TAPSO 3-[N-tris(Hydroxymethyl)methylamino]-2-hydroxypropanesulfonic acid							7.0	8.2				
TEA Triethanolamine							7.3	8.3				
TES N-tris[Hydroxymethyl]methyl-2-aminoethanesulfonic acid							6.8	8.2				
Tricine N-tris[Hydroxymethyl]methylglycine							7.4	8.8				