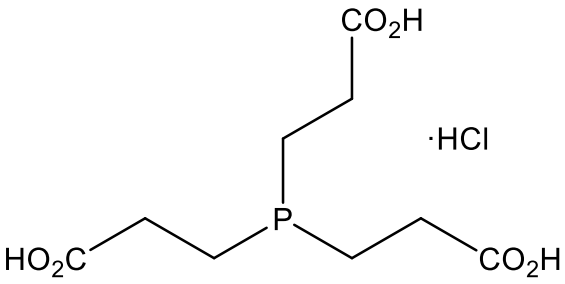
Catalog # 10-2961

TCEP HCl

CAS# 51805-45-9

Tris(-Carboxyethyl)phosphine HCl

Lot # X106773



A reagent for selective reduction of disulfides in aqueous solutions[1-3] with distinct advantages over DTT which are application specific[3]. For example, spin labels are more stable with TCEP than DTT, Ni^{2+} (leached from affinity columns) causes rapid oxidation of DTT with no effect on TCEP and for long term storage of proteins TCEP is more stable than DTT with no metal chelator (EGTA) present but DTT is more stable in the presence of metal chelators.[3]

1) Fischer *et al*. (1993), *In situ reduction suitable for matrix-assisted laser desorption/ionization and liquid secondary ionization using tris(2-carboxyethyl)phosphine*; Rapid Commun. Mass Spectrom., **7** 225

2) Kirley *et al*. (1989), *Reduction and fluorescent labeling of cyst(e)ine-containing proteins for subsequent structural analysis*; Anal. Biochem., **180** 231

3) Getz *et al*. (1999), *A comparison between the sulfhydryl reductants tris(2-carboxyethyl)phosphine and dithiothreitol for use in protein biochemistry*; Anal. Biochem., **273** 73

PHYSICAL DATA

Molecular Weight:	286.65
Molecular Formula:	$C_9H_{15}O_6P$ • HCl
Purity:	99% by TLC
	NMR: (Conforms)
Solubility:	Water (up to 50 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied, desiccated at -20°C for up to 1 year from the date of purchase. Solutions in distilled water may be stored at -20°C for up to 1 month\.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.

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