

**Product Name:** 0.5M TCEP-HCl Solution (pH 6.0, 7.0 and 8.0)**Cat. #:** T5082Store at 4°C Ship at RT Shelf Life: **24** months

**Description:** Tris(2-carboxyethyl) phosphine hydrochloride (TCEP) Solution is an extraordinarily powerful, odorless, thiol-free reducing agent with broad application to protein and nucleic acid involving reduction of disulfide bonds. The pH value of the solution is designed at 6.0, 7.0, and 8.0 for multiple choices. This product is an effective and convenient replacement for  $\beta$ mercaptoethanol ( $\beta$ -ME) or DTT in protein analysis.

Cat. #	Size, PH
T5082-01-6.0	1 ml, pH=6.0
T5082-01-7.0	1 ml, pH=7.0
T5082-01-8.0	1 ml, pH=8.0
T5082-10-6.0	10 ml, pH=6.0
T5082-10-7.0	10 ml, pH=7.0
T5082-10-8.0	10 ml, pH=8.0
T5082-50-6.0	50 ml, pH=6.0
T5082-50-7.0	50 ml, pH=7.0
T5082-50-8.0	50 ml, pH=8.0

**Direction for use:** TCEP breaks disulfide bonds and can be used for a wide variety of protein applications including SDS-PAGE, mass spectrometry, labeling with cysteine specific tags, and modification of cysteine containing compounds. Its ability to prevent oxidation of protein samples makes it a useful buffer component because it helps to preserve enzymatic activity.

**Key Features:**

- Replacement of DTT and  $\beta$ -ME: unlike DTT and  $\beta$ ME, TCEP is odor-free, contributing to a healthier lab environment.
- High Efficient: 5 to 50mM TCEP thoroughly, skip most peptide or protein disulfide bonds, only a few minutes.
- Stable and versatile: reduces peptides and proteins over a broad range of pH, salt, detergent, and temperature conditions. It is resistant to air oxidation; nonvolatile and nonreactive toward other functional groups found in proteins.
- Compatible: removal of this reagent is not necessary before most applications, (e.g. histidine-tagged protein purification, maleimide conjugations), because TCEP does not contain sulfhydryl groups.

**Related products:**

Urea Solution (8M) (T5037)

Ammonium Sulfate Solution (4M) (T5038)

DTT Solution (1M) (T5039)

MOPS Buffer (1M) (T5041)

Bicine buffer (1M) (T5042)

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<i>Better than Matrigel</i>	<b>Real 3D</b> cell gel, 3-stiffness for different type cells # P720
<i>Mouse Tail DNA Extract</i>	20 min. fast. Accurate & consistent. No use of organic solvents. Ready for PCR Cat.# T605
<i>1 drop do PCR Mix</i>	PCR Master Mix - easy dripping Cat.# W2599-5
<i>Thermophilic Reverse Transcriptase</i>	with optimal temperatures at 60-62°C, it can be heat-inactivated at ≥90°C Cat.# W140  1-Step 2x RT-PCR Master Mix-SYBR Cat.# W141, W142, W143 Make RNA analysis <b>easy</b> as DNA analysis.
<i>2x Flash HS PCR Mix (Dye)</i>	Fast extension rate (5-15 sec/kb) and fast HotStart # W3007-1
<i>2x Super Pfx MasterMix</i>	Strong amplification ability and fast (4-6 kb/min) # W2965-1
<i>Lentiviral Expression Vectors</i>	<b>4 promoters</b> : SFFV, CAG, CMV, EF1 & 4 selections
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<i>Water Bath Treatment</i>	1 tablet / treatment per week Cat.# T20
<i>Simple and Reliable</i>	SV40T / hTERT <i>Cell Immortalization Kits</i>
<i>Pure Plasmid Miniprep</i>	High adsorption efficiency of plasmid DNA Cat. # W0500-50