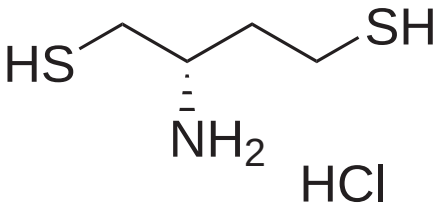
Reduce
Disulfides Faster.

Add Aldrich™

ALDRICH Chemistry

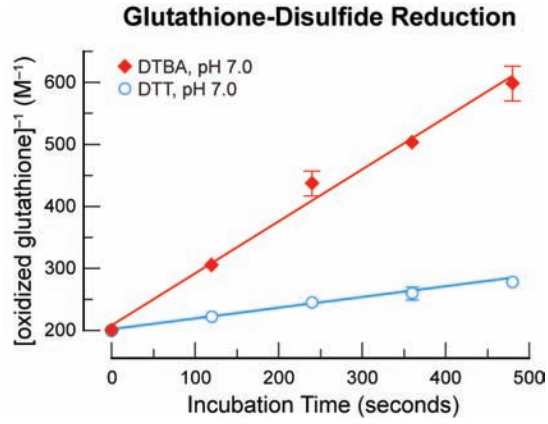
Improved Biological Reducing Reagent

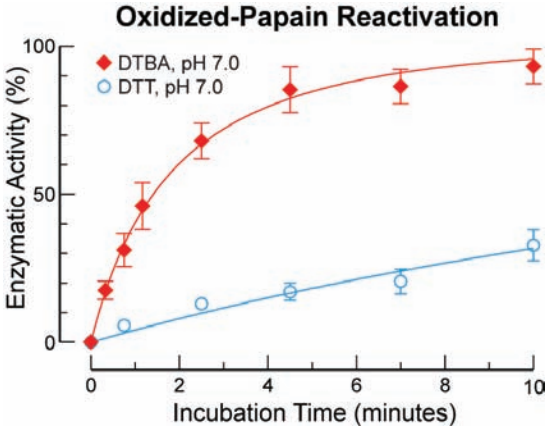
Dithiobutylamine, (DTBA)



DTBA, Dithiobutylamine
774405

Dithiobutylamine (**Product No.** 774405) is a new and improved reagent for the reduction of disulfide bonds in biological systems. As seen in the graphs below, DTBA has been shown to reduce the disulfide in oxidized glutathione 5x faster and reduce (activate) the cysteine protease papain 14x faster than commonly used DTT. The presence of the primary amine group in DTBA, as opposed to the two hydroxyl groups of DTT, leads to lower pKa values for the two thiols of the new reagent, attributing to its enhanced biological reducing activity. Another advantage of the primary amine group is that it allows for easy separation of DTBA from your system by cation-exchange methods.





For more information and to purchase this product, visit
Aldrich.com/dtba

PJS
80368
1023

Reference

Lukesh, J.C. III; Palte, M.J.; Raines, R.T., *J. Am. Chem. Soc.* **2012**, *134(9)*, 4057.