

# [Lukab potentiation of activity (i.e., combination effect)](https://assignbuster.com/lukab-potentiation-of-activity-ie-combination-effect/)

LukAB is secreted by S.

aureus as a heterodimer, with oligomerization and pore formationoccurring on the surface of phagocytes at the time of cellular destruction. Our recent data indicate that neutralizing anti-LukAB human mAbs achievetoxin neutralization by distinct mechanisms. Based on these findings, wehypothesize that an oligoclonal mixture of anti-toxin mAbs with high affinityand distinct properties will have increased potency in the blockage ofLukAB-mediated cytotoxicity.  To assessthis, we propose a series of related experiments:  In vitro toxin neutralization with distinctmAb combinations.

We willassess potentiation of activity (i. e., combination effect) in a series ofexperiments measuring mAb neutralization of LukAB-mediated neutrophil killing. Methods:  Anti-LukAB mAb preparations (or isotypecontrols) will be incubated in the presence of LukAB for 30 minutes, prior tothe addition of neutrophil-like HL-60 cells. After a one-hour intoxication, Cell Titer® Aqueous One dye will be added, and neutralization of cytotoxicitywill be measured as a function of the percentage of cells that remain alivefollowing intoxication relative to controls. Experiments will be performed intriplicate with cells from independent vials.