## APPENDIX A

## SUMMARY OF COVALENT ASSAYS

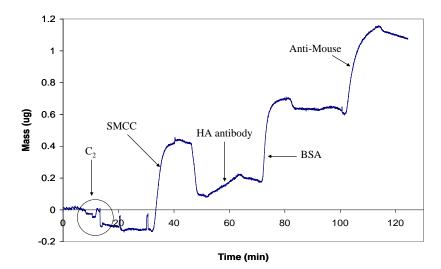


Figure 51. Covalent assay using DTT cleaved HA antibody as a test for the mAb 15H10 trials

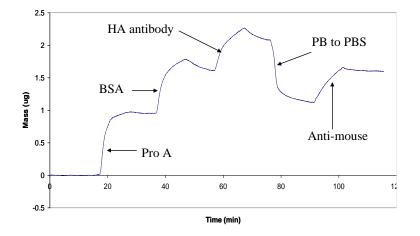


Figure 52. A covalent sensor using Protein A that has been reacted with Traut's reagent to form a covalent link between the gold and protein A.

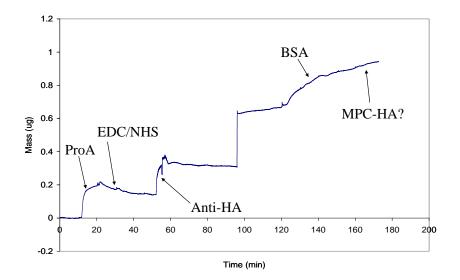


Figure 53. QCM experiment attempting to active Protein A using EDC/NHS coupling to covalently link to the anti-HA antibody. Detection was attempted against a HA-MPC mimic.

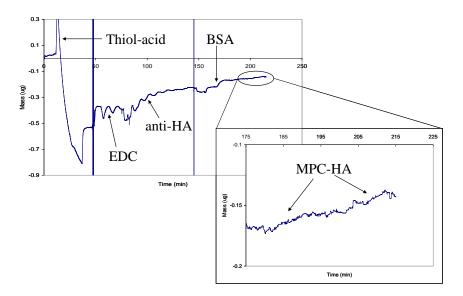


Figure 54. A SAM made from a thiol terminated carboxylic acid that is then activated with EDC/NHS to bond with an antibody for HA.