

SUPPORTING INFORMATION

Antibodies Irreversibly Adsorb to Gold Nanoparticles and Resist Displacement by Common Blood Proteins

*Guadalupe Ruiz, Nicki Ryan, Kylie Rutschke, Olatunde Awotunde, and Jeremy D. Driskell**

Department of Chemistry, Illinois State University, Normal, IL 61790

Table S1. Characteristics of plasma proteins.

Protein	Molecular Weight (kDa)	pI	Cysteine residues	References
mouse IgG	150	6.6-7.2	36	1
Fibrinogen	340	5.5	58	2-3
HSA	66	4.7	35	4-5
Transferrin	78	5.5	38	6-7

REFERENCES

1. Liu, H.; May, K., Disulfide bond structures of IgG molecules: structural variations, chemical modifications and possible impacts to stability and biological function. *MAbs* **2012**, *4* (1), 17-23.
2. Martinez, M.; Weisel, J. W.; Ischiropoulos, H., Functional impact of oxidative posttranslational modifications on fibrinogen and fibrin clots. *Free Radical Bio. Med.* **2013**, *65*, 411-418.
3. Krantz, S.; Lober, M.; Fiedler, H., Isoelectric Focusing of Fibrinogens on Polyacrylamide Gels. *Febs Lett* **1970**, *11* (2), 100-&.
4. Vlasova, I. M.; Saletsky, A. M., Study of the Denaturation of Human Serum Albumin by Sodium Dodecyl Sulfate Using the Intrinsic Fluorescence of Albumin. *J. Appl. Spectrosc.* **2009**, *76* (4), 536-541.
5. Sugio, S.; Kashima, A.; Mochizuki, S.; Noda, M.; Kobayashi, K., Crystal structure of human serum albumin at 2.5 angstrom resolution. *Protein Eng.* **1999**, *12* (6), 439-446.
6. Wang, S. H.; Kaltashov, I. A., Identification of Reduction-Susceptible Disulfide Bonds in Transferrin by Differential Alkylation Using O-16/O-18 Labeled Iodoacetic Acid. *J. Am. Soc. Mass Spectr.* **2015**, *26* (5), 800-807.
7. Hovanessian, A. G.; Awdeh, Z. L., Gel Isoelectric-Focusing of Human-Serum Transferrin. *Eur. J. Biochem.* **1976**, *68* (2), 333-338.