

OxiSelect AOPP Assay Kit

OxiSelect AOPP Assay Kit (200 assays)

CATALOG #

AAA44556

PRODUCT SYNONYMS

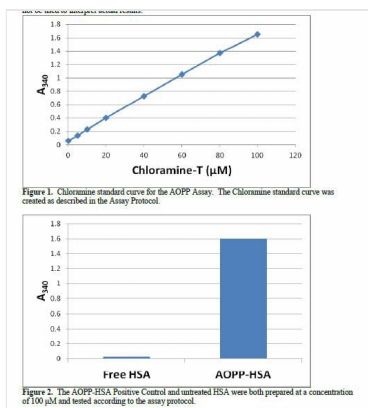
OxiSelect AOPP; OxiSelect AOPP Assay Kit (200 assays); OxiSelect AOPP assay kit

PRODUCT SPECIFICATIONS

Preparation and Storage

Upon receipt, store the AOPP-HSA positive control at -20 degree C. Store all other components at 4 degree C.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for OxiSelect AOPP assay kit	Principle of the assay: The Advanced Oxidation Protein Products (AOPP) Assay Kit is a bioassay tool for the direct quantitative measurement of AOPPs in biological samples. The unknown AOPP-containing samples or Chloramine standards are first mixed with an assay reaction initiator that begins a color development process. After a brief incubation, a stop solution is added and the samples and standards can be read with a standard colorimetric plate reader. The AOPP content in unknown samples is determined by comparison with the predetermined Chloramine standard curve. Background: Oxidative stress is defined as an increase in the production of reactive oxygen species (ROS) due to an imbalance between antioxidant and oxidants. Advanced Oxidation Protein Products (AOPP) are uremic toxins created during oxidative stress through the reaction of chlorinated oxidants, such as chloramines and hypochlorous acid, with plasma proteins. AOPPs are structurally similar to Advanced Glycation End-Product (AGE) proteins and exert similar biological activities. AOPPs are elevated in patients with renal complications, atherosclerosis, diabetes mellitus, systemic sclerosis, as well as HIV-positive patients. Human Serum Albumin (HSA) treated with HOCl and AOPP generated in vivo can ignite oxidative reactions in both neutrophils and monocytes, which indicates both can be used as true mediators of inflammation. Although the mechanisms of AOPP degradation and elimination from the blood remain to be fully elucidated, it appears that the liver and spleen are mostly responsible for their isolation and removal. The AOPP Assay has provided relevant information concerning free radical activity in many uremic associated disease states and the measurement of anti-oxidant characteristics of many compounds. The rapid and easy protocol has been modified by researchers in the evaluation of plasma and tissue samples. The AOPP-HSA concentration was determined from a Chloramine equivalence standard. The OxiSelect AOPP Assay Kit offers a simple, reproducible, and consistent system for the detection of advanced oxidation protein products in plasma, lysates, and tissue homogenates. This kit includes a Chloramine standard and an AOPP Human Serum Albumin conjugate for use as a positive control. Each kit provides sufficient reagents to perform 200 tests including standard curve and unknown samples.
Product Categories/Family for OxiSelect AOPP assay kit	Oxidative Stress/Damage; Protein Oxidation/Nitration; Advanced Oxidation Protein Products (AOPP) Assay
References	1. Deschamps-Latscha B. et al. (2005) Am. J. Kidney Dis. 45(1): 39-47. 2. Servettaz, A. et al. (2007) Ann. Rheum. Dis. 66: 1202-1209. 3. Witko-Sarsat, V. et al. (1996) Kidney International 49: 1304-1313.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.