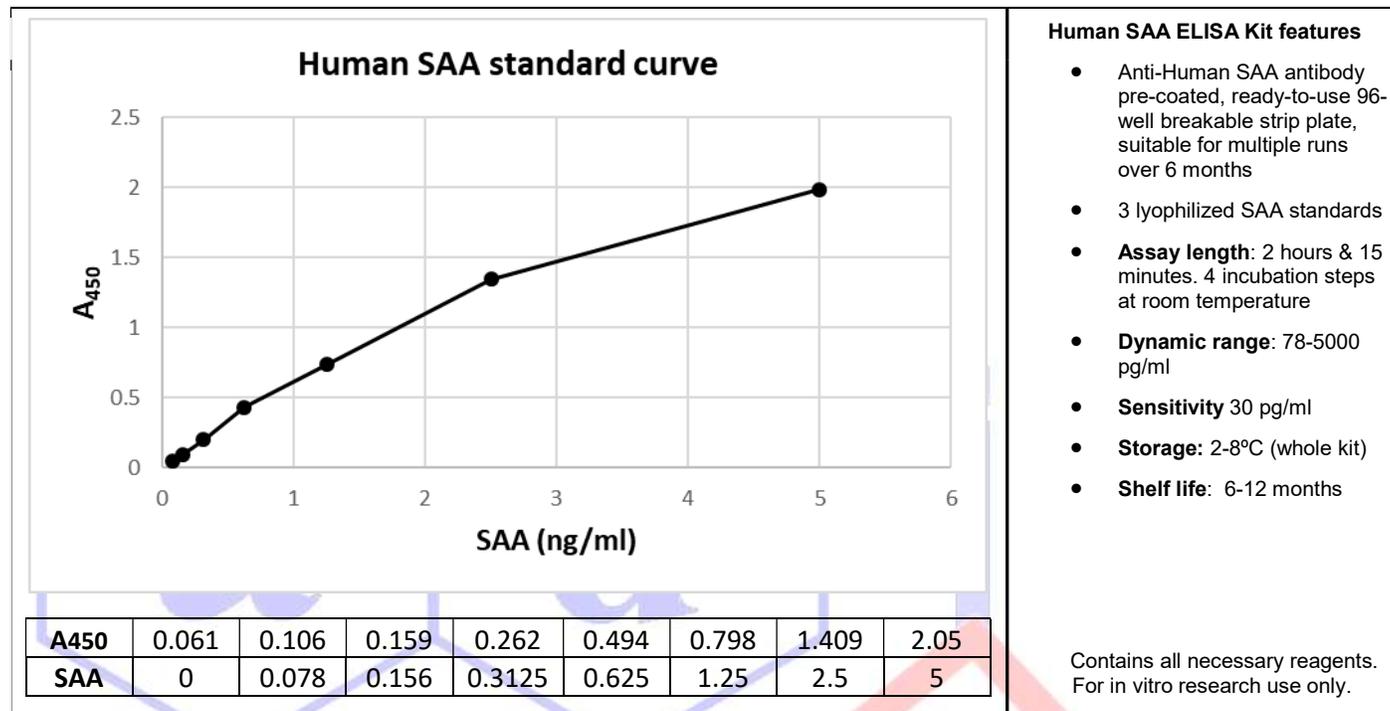


### Human Serum Amyloid A ELISA Kit Cat# 6240-20

The Human SAA ELISA Kit is a highly sensitive sandwich ELISA for the measurement of Human SAA in serum, plasma, culture supernatants, and other appropriately qualified matrices.



**Assay Procedure:** Allow all reagents to reach room temperature. Arrange and label required number of strips.

- Step 1.** Pipette 100 ul of appropriately diluted samples and calibrators into wells and incubate for 1 hour at room temperature.
- Step 2.** Wash the wells 3X with 300 ul of wash buffer for each well
- Step 3.** Add 100 ul of biotin conjugated detection antibody to each well and incubate for 30 minutes at room temperature
- Step 4.** Wash the wells 3X with 300 ul of wash buffer for each well
- Step 5.** Add 100 ul Streptavidin-HRP detection reagent to each well and incubate for 30 minutes at room temperature
- Step 6.** Wash the wells 3X with 300 ul of wash buffer for each well
- Step 7.** Add 100 ul of TMB Substrate solution to all wells, mix gently, and incubate at room temperature for 15 minutes.
- Step 8.** Pipette 100 ul of stop solution into each well and mix gently. Measure at 450 nm w/ 630 nm as a reference filter if available.

#### Performance Characteristics

**Sensitivity:** 30 pg/ml  
**Average recovery:** 100 ±15%  
**Average linearity:** 100 ±15%  
**Precision:** Intra-assay: <10%      Inter-assay: <10%

#### Minimum recommended dilution

**Serum & Plasma:** 10-fold

**Culture supernatant:** 2-fold

**Note:** Minimum recommended dilution represents the dilution which is needed to eliminate matrix interference effects. All samples must be diluted to at least the minimum recommended ratio. Samples may be further diluted if the sample values fall within the standard curve, if sample volume is to be preserved, or if the sample value is above the highest OD on the standard curve

#### General Information

Human Serum Amyloid A protein-1 (SAA1) is a multifunctional apolipoprotein produced by hepatocytes in response to proinflammatory cytokines. It is secreted as a 12 kDa, 104 aa, nonglycosylated polypeptide that displaces apoA1 in the HDL3 complex. The SAA1 gene is one of three SAA genes in human, and it shows multiple alleles that are race dependent. The SAA1 gene product differs from the SAA2 gene product by only seven amino acids. Circulating SAA1 shows multiple proteolytically-generated isoforms, with anywhere from one-to-three amino acids being cleaved from either the N- or C-terminus. Mature human SAA1 is 72%, 82% and 72% aa identical to mature mouse, rabbit and hamster SAA1, respectively.

SAA is an acute phase serum protein that is elevated in mice approximately 50-fold following lipopolysaccharide (LPS) injection. In mice, two major forms of SAA are induced during the acute phase response, SAA1 and SAA2. Studies have shown that the two forms are similarly increased in response to different inflammatory stimuli.