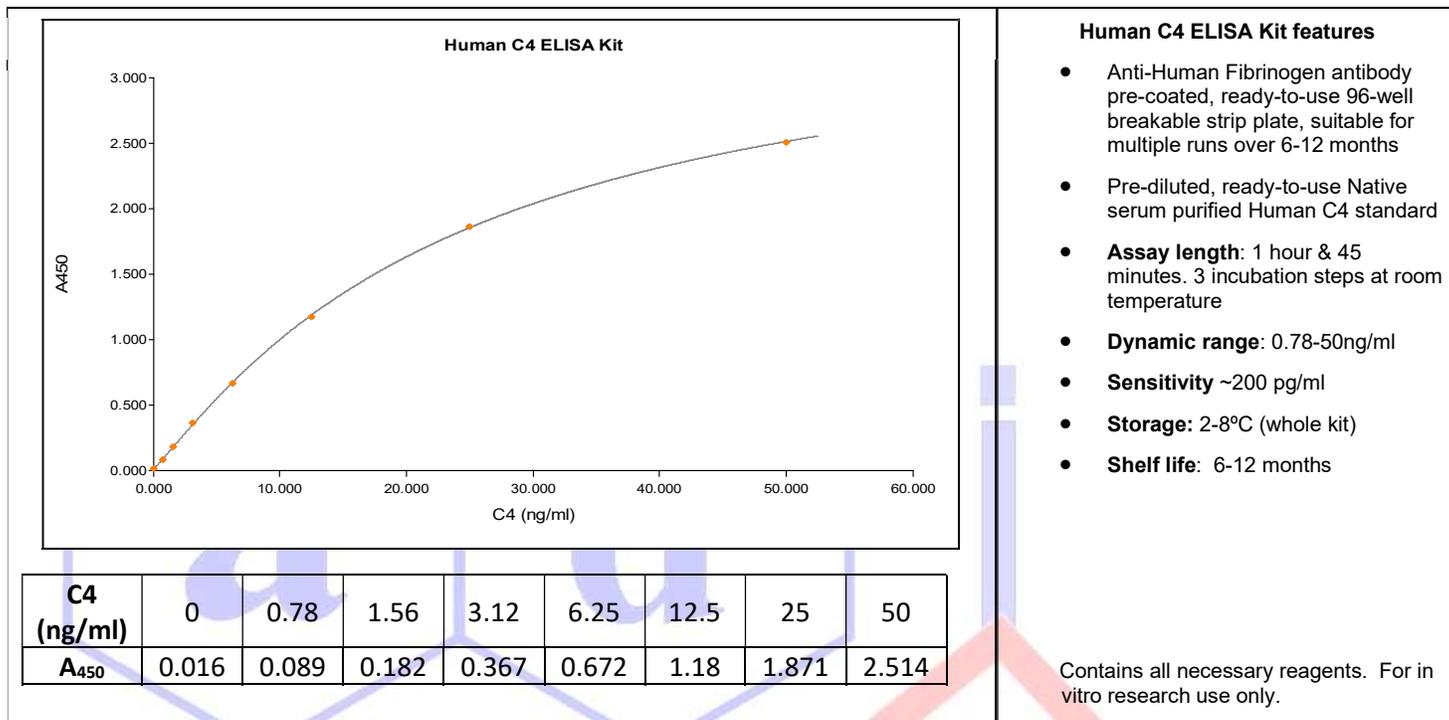


Human Complement C4 ELISA Kit Cat# 6290

The Human C4 ELISA Kit is a highly sensitive sandwich ELISA for the measurement of Human C4 in serum, plasma, culture supernatant, or 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 HRP 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 of TMB Substrate solution to all wells, mix gently, and incubate at room temperature for 15 minutes.
- Step 6.** 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: ~200 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

Normal C4 Serum range: 0.1-0.5 mg/ml
Recommended starting dilution: 1:20,000

General Information

Complement component 4 or C4 is a protein involved in the intricate complement system, originating from the human leukocyte antigen (HLA) system. It serves a number of critical functions in immunity, tolerance, and autoimmunity with the other complement components. It is a crucial factor in connecting the recognition pathways of the overall system instigated by the antibody-antigen complex to the other effector proteins of the innate immune system. C4 deficient are associated with increased infections or increased autoimmune activity. Complement deficiency may comprise between 1-10% of all primary immunodeficiencies.