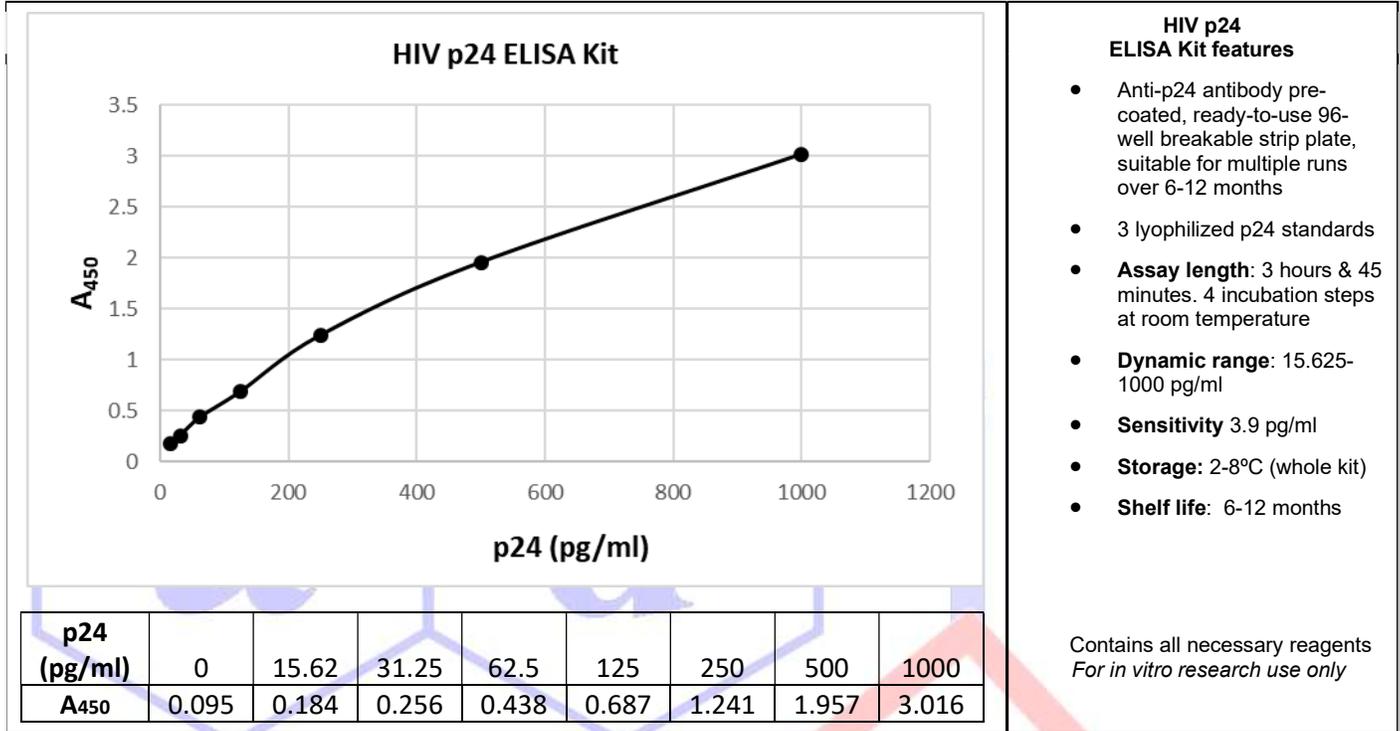


**HIV p24 ELISA Kit Cat# 4705**

The HIV p24 ELISA Kit is a highly sensitive sandwich ELISA for the measurement of p24 in serum, plasma, culture supernatants, and other appropriately qualified matrices



**HIV p24 ELISA Kit features**

- Anti-p24 antibody pre-coated, ready-to-use 96-well breakable strip plate, suitable for multiple runs over 6-12 months
- 3 lyophilized p24 standards
- **Assay length:** 3 hours & 45 minutes. 4 incubation steps at room temperature
- **Dynamic range:** 15.625-1000 pg/ml
- **Sensitivity** 3.9 pg/ml
- **Storage:** 2-8°C (whole kit)
- **Shelf life:** 6-12 months

Contains all necessary reagents  
*For in vitro research use only*

**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 2 hours 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 1 hour at room temperature
- Step 4.** Wash the wells 3X with 300 ul of wash buffer for each well
- Step 5.** Add 100 ul of Streptavidin HRP conjugate 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:** ~3.9 pg/ml  
**Average recovery:** 100 ±15%  
**Average linearity:** 100 ±15%  
**Precision:** Intra-assay: <10% Inter-assay: <10%

**Minimum recommended dilution**  
**Culture supernatants: 2-fold**  
**Serum & Plasma: 2-fold**

**Note:** Minimum recommended dilution represents the dilution which is needed to eliminate matrix interference effects and obtain optimal recovery. 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 immunodeficiency virus (HIV) is a retrovirus that can lead to a condition in which the immune system begins to fail, leading to opportunistic infections. HIV primarily infects vital cells in the human immune system such as helper T cells (specifically CD4+ T cells), macrophages and dendritic cells. HIV infection leads to low levels of CD4+ T cells through three main mechanisms: firstly, direct viral killing of infected cells; secondly, increased rates of apoptosis in infected cells; and thirdly, killing of infected CD4+ T cells by CD8 cytotoxic lymphocytes that recognize infected cells. When CD4+ T cell numbers decline below a critical level, cell-mediated immunity is lost, and the body becomes progressively more susceptible to opportunistic infections.