HIV (Ag/Ab) 4th Gen
HIV-1 Group M (A, B, C, D, E, F, G) Group O, N & HIV-2
EUISA

Introduction

HIV-1 is an envelope-attachment antigen test (EUISA) for the detection of antibodies or antigens to human immunodeficiency virus (HIV) type 1 and type 2 in serum or plasma. The kit is also known as 4th-generation EUISA for HIV detection, as it is designed to detect antibodies to the envelope protein 2 (E2) of HIV-1. HIV-1 is the primary cause of AIDS, leading to severe immunodeficiency and a high mortality rate. The EUISA test is used to detect HIV antibodies in blood samples from individuals who may be at risk of HIV infection.

Summary

The HIV-1 EUISA kit consists of two antigen capture strips that contain HIV-1 antigens. The test uses an enzyme-linked immunosorbent assay (ELISA) method to detect antibodies to HIV-1. The kit includes a control and a test strip, which are used to detect HIV antibodies in serum or plasma. The test is performed by incubating the sample with the control and test strips, and visualizing the results using a colorimetric method.

Materials and Instruments

- EUISA 12-well plate
- EUISA buffer
- EUISA wash buffer
- EUISA stop solution
- EUISA reagents
- EUISA controls

Methods

1. Place 20 µl of EUISA buffer into each well of the EUISA 12-well plate.
2. Add 20 µl of EUISA control to each well, and incubate for 5 minutes.
3. Add 20 µl of EUISA test sample to each well, and incubate for 5 minutes.
4. Add 20 µl of EUISA wash buffer to each well, and incubate for 5 minutes.
5. Add 20 µl of EUISA stop solution to each well, and incubate for 5 minutes.
6. Determine the absorbance of each well using a spectrophotometer.

Interpretation

- Absorbance values above a certain threshold indicate the presence of HIV antibodies.
- Absorbance values below a certain threshold indicate the absence of HIV antibodies.

Results

- Negative: Absorbance < 0.100
- Positive: Absorbance ≥ 0.100

Conclusion

The EUISA kit is a rapid and reliable method for detecting HIV antibodies, and is widely used in clinical laboratories around the world. The test is simple to perform and provides results within 20 minutes. The EUISA kit is particularly useful for screening large numbers of samples, and is an important tool in the fight against HIV/AIDS.