Mospire

Human Leukocyte Antigen B27 Nucleic Acid Test Kit

Fluorescent Probe-Based Real-Time PCR Assay

—Indicator of Ankylosing Spondylitis Preventive

HLA–B27 is a human leukocyte antigen (HLA) class I molecule, ubiquitously expressed on nearly all nucleated cells, with notably high density on lymphocyte surfaces. To date, it remains one of the most clinically significant HLA alleles associated with disease pathogenesis.

Ankylosing spondylitis (AS) is a chronic inflammatory disease characterized by progressive axial skeletal involvement, frequently affecting the sacroiliac joints with variable peripheral joint manifestations. The strong association between AS and HLA–B27 has been well documented, establishing HLA–B27 testing as a critical diagnostic and prognostic marker in AS clinical evaluation.

Testing Principle

This kit uses polymerase chain reaction (PCR) technology based on the TaqMan fluorescent probe to detect HLA-B27. The probes for HLA–B27 were labeled with FAM, and the probe for internal control was labeled with HEX/VIC.

Product Features

High Sensitivity

The limit of detection of the kit is 1ng ▪ µL^{-1} genomic DNA.

High Specificity

No cross-reactivity with other subtypes of HLA gene.

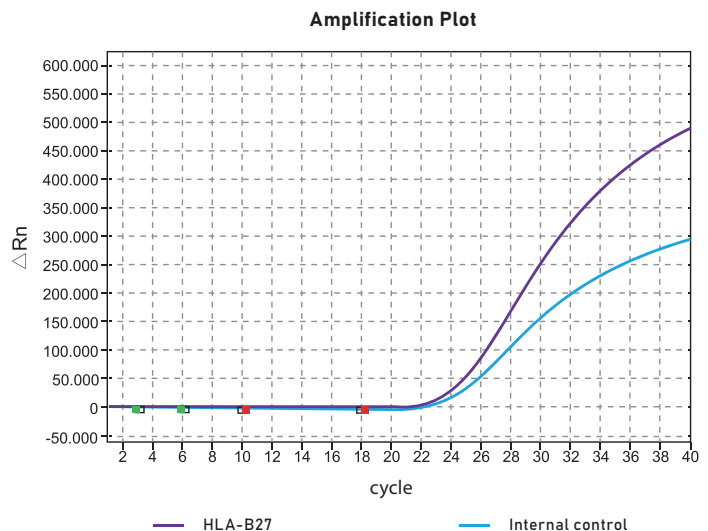**Clinic-Friendly Sampling**

No viable lymphoid tissue required.

Detection Significance

HLA-B27 testing helps differentiate ankylosing spondylitis (AS) from other conditions causing back pain and arthralgia.

HLA-B27 testing aids in early diagnosis and treatment of AS, helping to prevent progression and reduce the disability rate.

As a genetic marker, HLA-B27 enables early screening of high-risk individuals with a family history.

Applicable Instruments

- Applied Biosystems™ 7500 Real-Time PCR System

- Stratagene MX 3000P Real-Time PCR System

- BioRad CFX96 Real-Time PCR System

- Other Real-Time Thermal Cyclers which could detect FAM and VIC/HEX simultaneously.

Example Result

Amplification Plot

— HLA-B27   — Internal control

Ordering Information

Cat No.	Product Name	Sample Types	Kit Size	Certification
M011T024A0C2	Human Leukocyte Antigen B27 Nucleic Acid Test Kit	EDTA-anticoagulated whole blood sample	24 Tests/Kit	CE NMPA

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