

CLAIMS

[Claim 1]

A method for detecting the *SMN1* gene in a dried blood spot in a filter paper by real-time PCR, including the steps of (A) to (D) below:

(A) a step of adding the dried blood spot in a filter paper to a PCR reaction tube;

(B) a step of adding a PCR reagent to the PCR reaction tube, wherein the PCR reagent contains one or more primers selected from the group consisting of the forward primer of (1) and the reverse primer of (2) below: (1) a forward primer having any of the nucleotide sequences of SEQ ID NOs: 1 to 9; and (2) a reverse primer having any of the nucleotide sequences of SEQ ID NOs: 16 to 21, a polymerase, dNTPs and an intercalator or a fluorescently labeled probe;

(C) a step of performing PCR reaction in the tube containing the PCR reagent and the dried blood spot in a filter paper; and

(D) a step of sequentially and optically detecting a target nucleic acid in the *SMN1* gene amplified by the PCR reaction.

[Claim 2]

The detection method according to claim 1, wherein the dried blood spot in a filter paper is a circular punched piece with a diameter of 1.2 mm to 2.0 mm or a punched piece containing whole blood in an amount of 0.95 v/v% to 6.6 v/v% based on the total amount of the reaction solution.