





GMO Screening by Real-Time PCR

Introduction

GMO or known as Genetic Modified Organism is referred to any plant, animal and microorganism that has genetic makeup modified in a laboratory using genetic engineering or transgenic technology.

Due to the health public concern, GMO screening is one of the solutions to prevent or as a guide for foods selection that might contained GMO genes.

GMO screening by Real time PCR is the most reliable method due to its sensitivity and specificity. This is the method of choice in our GMO screening.

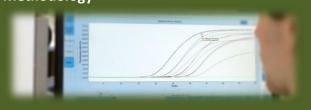






ALS Malaysia is part of the ALS global laboratory group and is an ISO 17025 accredited laboratory equipped with state of the art facilities. We provide testing services to various government and private sectors across the world.

Methodology



The GMO screening mainly depends on the three major contributors for GMO existence in food or animal feed which are 35S-promoter (P-35S) of the cauliflower mosaic virus (CaMV), the 3'untranslated terminator region of the nopaline synthase gene (T-NOS) of Agrobacterium tumefaciens and the figwort mosaic virus promoter (P-FMV). The detection is based on multiplex realtime PCR to specially detect genetically modified plants in food and animal feed. The kits that we are using comply with ISO 21569 and the international regulation for the detection of genetically modified DNA sequences. Furthermore, an internal amplification control is also included and detected in a separate channel.

Test Method: GMO Screening by Real Time PCR Sample size required: 1 to 5 grams
Our standard laboratory turnaround time is 5-7 working days from the receipt of samples.

Please contact us to discuss your analysis requirement and we will assist you with the proposal.