

Luminex

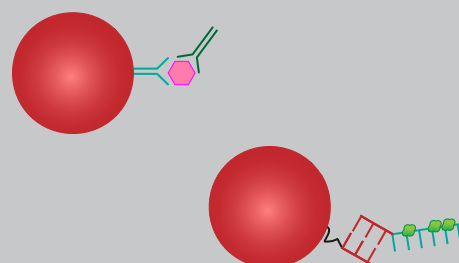
By Prime Diagnostics - Multiplex Detection of Plant Pathogens

Luminex technology is based on paramagnetic microspheres (beads) that each have a unique colour, creating a bead address. Each bead address is bound to a specific antibody (xMAP) or molecular fragment (xTAG), which can bind to a specific pathogen. The bead address and the bound pathogen are independently measured in a Luminex device. This allows for fast and accurate detection of up to 50 pathogens in one sample simultaneously.

Advantages

- Lower costs
Due to the multiplexing capabilities the costs per data point are lower compared to standard methods such as ELISA.
- High sensitivity
Up to 10x more sensitive than standard methods such as ELISA.
- Rapid
From plant material to results in less than 4 hours, Luminex requires less labor hours than most standard methods for the detection of several diseases in one crop.
- Multiplex
1 to 50 pathogens can be detected simultaneously in one plant sample.
- Kit customization
We can customize our kits so that they only detect the pathogens you are interested in.
- Flexibility
Technology can be used for both antibodies (xMAP) and molecular (xTAG) based assays.

xMAP - Antibody



xTAG - Molecular

Approach and procedure

Luminex already has an impressive track record in human diagnostics, and the development of kits for agro-food related diagnostics is progressing rapidly due to concrete demands from the industry. At this moment Luminex-based multiplex tests are used in practice for the detection of up to 50 plant pathogens in a single sample.

If you are interested in this technology, you can count on extensive support from our team during, and after, implementation. The available 'ready-to-use' kits for various pathogens can be obtained via Prime Diagnostics.

You can find our Luminex, and all other, products on our website: www.primediagnosics.com



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