

## Product Information: DAS-ELISA

### *Acidovorax avenae* subsp. *citrulli* (Aac)

Bacterial fruit blotch (BFB) is a disease of watermelon and other cucurbit crops caused by the bacterium *Acidovorax avenae* subsp. *citrulli* (2; formerly named *Pseudomonas pseudoalcaligenes* subsp. *citrulli*). The disease is seed borne and is first noticed as small water-soaked lesions on seedlings. Bacterial fruit blotch can cause crop losses if allowed to progress in fields. Prevention is possible only by planting healthy seeds.

#### Specificity and sampling instruction

The DAS-ELISA reagents (1) were made against a blend of different Aac isolates originating from USA, Brazil, and Thailand (R. Walcott, pers. communication). The reagent is suitable for detecting Aac in cultures or in symptomatic plant leaves. All isolates of Aac tested so far can be detected. Isolates of Aac can be detected to a concentration of  $10^4$  cfu per ml (diluting bacteria from pure culture in extraction buffer). This detection limit is nearly reached when bacteria are diluted in sap of healthy watermelon leaves. There are cross-reactions with other subsp. of *Acidovorax avenae*, such as *A. avenae* subsp. *cattleyae* (Aacat) or *A. avenae* subsp. *avenae* (Aaa). Best results are obtained with an 1:20 (w/v) plant tissue extraction with extraction buffer «General» (Art. No. 110120).

#### Information on the antibodies

Coating IgG: polyclonal; conjugate: polyclonal

#### References

- (1) Clark, M.F., and Adams, A. N. 1977. J. gen. Virol. 34:475-483.
- (2) Saddler, G.S. (1994), *Acidovorax avenae* subsp. *citrulli*. IMI Descriptions of Fungi and Bacteria, No. 1213. Mycopathologia, 128, pp. 47-48.

#### Ordering Information

**BIOREBA offers the following formats:**

**Individual ELISA reagents** for 100, 500 or 1000 assays: IgG and/or conjugate for the working volume of 200 µl/test/well.

**Reagent sets** for 480 or 960 assays: IgG and conjugate, positive and negative controls, and microtiter plates (F-96) for a working volume of 200 µl/test/well.

**Complete kits** for 96, 480 or 960 assays: All reagents, controls, microtiter plates (F-96), buffers, and substrate necessary for a working volume of 200 µl/test/well.

ELISA buffers, equipment for sample preparation and disposables are also available.

For all Art. No. please refer to our product catalogue or our homepage [www.bioreba.com](http://www.bioreba.com) and for prices and further information on any other product from BIOREBA, please contact your local distributor or our office in Switzerland.

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Adaptations from last version: changed assays of individual ELISA reagents.