Product: AflaCLEAN SMART

According to the matrix please select the appropriate method.

1 For non fatty matrices recommended e.g. maize:

- Extract 20 g of sample with 100 mL (80 % methanol : 20 % water) in a blender jar at high speed for five minutes.
- Pass the extract through a plaited filter.
- Add 14 mL of the purified extract to 86 mL PBS buffer (pH 7.2).
- Continue with 4.

2 For fatty matrices recommended e.g. peanut, hazelnut and pistachio paste:

- Add 2.0 g of NaCl to 20 g of sample.
- Extract with 100 mL (80 % methanol : 20 % water) and 50 mL of n-hexane in a blender jar at high speed for five minutes.
- Pass the extract through a plaited filter
  (Note: if there is a separation of phases to be found, the lower liquid phase is used for the following steps). To accelerate phase separation the extract could be centrifuged at 1000xg for 5 min.
- Add 14 mL of the purified extract to 86 mL PBS buffer (pH 7.2).
- Continue with 4.

3 For spices and animal feed e.g. black pepper, nutmeg, turmeric, chilli, pet food, animal feed:

- Add 2.0 g NaCl to the sample.
- Extract with 100 mL of methanol: water (8:2) and 50 mL of n-hexane in a blender jar at high speed for three minutes.
- Pass the extract through a plaited filter.
  (Note: If there is a separation of phases to be found, the lower liquid phase is used for the following steps). To accelerate phase separation the extract could be centrifuged at 1000xg for 5 min.
- Add 1 mL of the purified extract to 6 mL PBS buffer containing 8 % Tween20.
- Continue with 4.

LCTech GmbH
Daimlerstr. 4
84419 Obertaufkirchen, Germany
Tel. +49 8082 2717-0
info@LCTech.de
www.LCTech.de

4 Immunoaffinity chromatography procedure:

- The sample is recommended to be passed through a whatman filter to remove residual turbidity.
- Take 0 - 10 mL of the diluted extract (depending on the extraction procedure and the sensitivity of detection), for spices (e.g. black pepper, cumin, turmeric, ginger, coriander) a maximum of 2.8 mL could be applied onto the AflaCLEAN SMART column. It is indispensable to maintain a maximum flow rate of 3 mL/min. 10 mL diluted extract (using protocol 1 or 2) represent 0.28 g matrix. 2.8 mL diluted extract (using protocol 3) represent 0.08 g matrix.
- To wash the column, pass 2 mL of distilled water through the column with a maximum flow rate of 3 mL/min.
- Carefully remove the residual water by flushing air through the column.
- Elute with at least 0.4 mL of methanol; let the methanol act on the gel for 5 minutes to break antibody-analyte interaction.
- Dilute or concentrate eluate to your requirements and measure directly by HPLC; alternatively, carefully concentrate to dryness and store cool and in the dark.

If you have any questions, please contact: mycotoxins@LCTech.de

LCTech GmbH
Daimlerstr. 4
84419 Obertaufkirchen, Germany
Tel. +49 8082 2717-0
info@LCTech.de
www.LCTech.de