

## **DOSIMYCOTM**

Ready-to-use LC-MS/MS reagent kit for Mycophenolic acid in plasma

DOSIMYCO™ is a turnkey solution:

- 3 sets composed of: calibrators with 6 levels and blank, internal standards and quality controls with 3 levels
- Ready-to-use consumables: Mobile Phase A, Mobile Phase B, System Cleaning Phase, extraction buffer, reconstitution buffer, analytical & trap columns

With in-house developed Carbon 13 and Deuterium internal standards

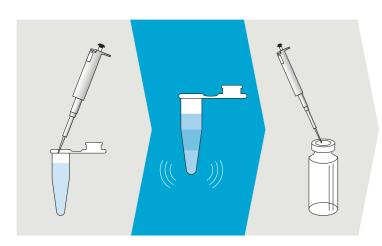
## All-in-one support for you

The Alsachim ready-to-use DOSIMYCO™ reagent kit supports your daily work.

Mycophenolic acid is an immunosuppressant drug used to prevent rejection in organ transplantation (heart, liver and kidney) and also for the treatment of autoimmune diseases.

In order to quantify these molecules in such complex matrices, Mass spectrometry is the best method through its specificity and sensitivity. Therefore, Alsachim developed an LC-MS/MS method kit for the quantification of mycophenolic acid and its glucuronide in plasma.

Based on MRM technology and the use of stable labeled internal standards, the DOSIMYCO™ kit enables simultaneous quantification of mycophenolic acid (MPA) and its glucuronide (MPA-G).



#### **Sample preparation:**

- Transfer calibrator or control or human sample
- Add Internal Standard
- Add Extraction buffer
- Shake and centrifuge
- Extract the supernatant
- Analyze

Insert in

LC-MS/MS

### Specific Configuration system – 2D Analysis

DOSIMYCO™ kit is based on the trap and elute method which ensures a clean sample in a remarkable analysis time.



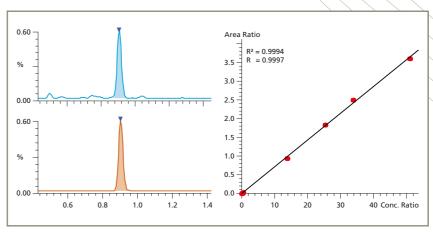
#### Parameter of analysis:

Injection volume:  $0.1-50~\mu L$  Ionization: ESI positive MS/MS Mode: MRM

	MRM transitions
MPA	338.10>159.10
MPA-G	514.10>159.10
[ <sup>13</sup> C, <sup>2</sup> H <sub>3</sub> ] MPA	342.10>159.10
[ <sup>13</sup> C, <sup>2</sup> H <sub>3</sub> ] MPA-G	518.10>159.10

## LC-MS/MS Analysis Data

#### Mycophenolic acid (MPA)



#### Analysis time: 1.5 min

## Specifications (Limit of quantification):

MPA:  $\langle 0.1 \text{ mg/L} \rangle$ 

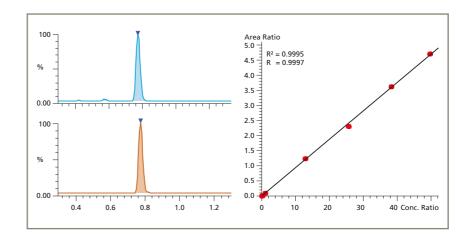
#### Linearity:

MPA: up to 100 mg/L

#### **Calibrators concentration:**

MPA: 0.1 to 50 mg/L

#### Mycophenolic acid β-D-glucuronide (MPA-G)



## Specifications (Limit of quantification):

MPA-G: < 0.1 mg/L

#### Linearity:

MPA-G: up to 500 mg/L

#### **Calibrators concentration:**

MPA-G: 1 to 250 mg/L

The validation method was developed following the ICH and COFRAC bioanalytical guidelines.

# Key benefits of ready-to-use DOSIMYCO™ kit



#### • Standardized:

Routine operation, making interlaboratory comparison easier

#### • Time saving:

Ready-to-use and optimized method (resolution, sensitivity, speed of analysis), validated method incl. sample preparation and data acquisition methods

- Supported by the equipment manufacturer
- Consistent QC material available

Kit Components	
227-40300-58	DOSIMYCO™ Kit for 200 analysis (RUO)
227-40302-58	DOSIMYCO™, Mobile Phase A
227-40303-58	DOSIMYCO™, Mobile Phase B
227-40304-58	DOSIMYCO™, System Cleaning Phase
227-40305-58	DOSIMYCO™, Extraction Buffer
227-40306-58	DOSIMYCO™, Internal Standard Set
227-40310-58	DOSIMYCO™, Calibrator Set (6 Levels + Blank)
227-40320-58	DOSIMYCO™, Control Set (3 Levels)
227-40342-58	DOSIMYCO™, Column Set (analytical & trap columns)
227-40335-58	Microtubes Optional
227-40343-58	LC vial set (vial and caps) Optional

#### **Methods and documentation**

Complete manual available including analytical and sample preparation methods, safety data sheets, quality and analysis certificates, expiry dates etc.



a Shimadzu Group Company

www.alsachim.com

160 rue Tobias Stimmer 67400 Illkirch Graffenstaden - France Tel.: +33 (0)390 - 402 200 Fax.: +33 (0)390 - 402 199 contact@alsachim.com