

# IMCSzyme<sup>®</sup> RT

genetically modified  $\beta$ -glucuronidase

Built for **Accuracy**,  
Optimized for **Speed**

**Why Choose IMCSzyme<sup>®</sup> RT?**

- This next-generation genetically modified enzyme is designed to hydrolyze at room temperature; no heating required!
- Optimized for a wide pH range for consistent and high recoveries across diverse, real, human samples.
- Includes a volatile, LC-MS friendly buffer that is acetate-based and won't clog your column!
- The only genetically modified enzyme that is resistant to naturally-occurring inhibitors found in human urine.
- Rapid room temperature incubation and master mix stability increases efficiency in the lab and enables seamless integration to automated workflows.

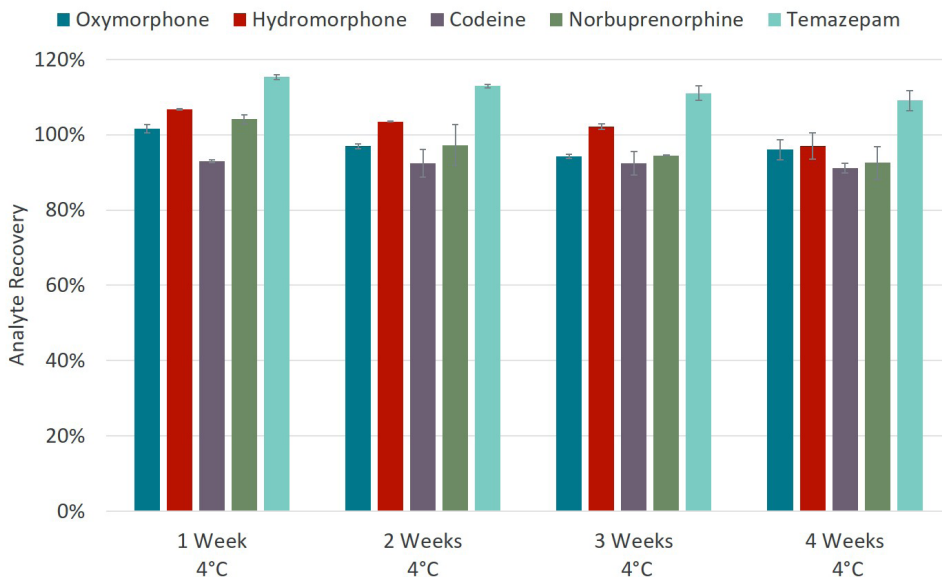


**Fast, clean,  
and accurate  
results...**

Room temperature  
incubation in just  
**15 minutes  
or less.**

# Master Mix prepared with IMCSzyme® RT is stable for at least *four weeks!*

IMCSzyme RT Hydrolysis



Components	Per 50 µL of Urine (µL)	Master Mix for 600 samples (mL)
Water	135	81
RTB	15	9
Internal Standard in 100% methanol	20	12
IMCSzyme® RT	5	3

## IMCSzyme® RT Master Mix is stable for up to four weeks.

Master Mix was stored at 4°C in a 100 mL glass mobile phase bottle. During work hours, the Master Mix was left at room temperature to mimic daily usage. The Master Mix was then used to screen urine samples for oxymorphone, codeine, temazepam, hydromorphone, and norbuprenorphine. There were no statistically significant difference in analyte recovery between the weekly groups ( $n = 2$ ;  $p > 0.05$ ). Error bars indicate  $\pm 1$  standard deviation.

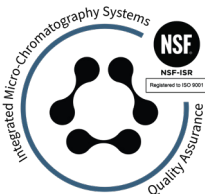
	Physical description	Specific activity (units*/mL)	Guaranteed shelf life	Master mix stability	Storage temperature	Incubation temperature	Incubation time	Sample prep compatibility	Buffer included
<b>IMCSzyme® RT</b>	Clear aqueous solution	>200,000	12 months at 4°C	4 weeks at 4°C	2 - 8°C	20 – 25°C (room temp)	≤ 15 minutes	Dilute-and-shoot, LLE, SPE	Room Temperature Buffer (RTB)**

\*One modified Fishman unit will liberate 1 microgram of phenolphthalein from phenolphthalein glucuronide per hour at 25°C (pH 6.8, 30-minute assay).

\*\*This volatile, LC-MS friendly buffer is acetate-based and will not clog your column.

Contact us for a free sample of IMCSzyme RT!

<https://IMCSzyme.com/RT>



MADE IN THE USA



Each bottle of enzyme comes with a free bottle of buffer!

IMCSzyme RT		Room Temperature Buffer	
Catalog #	Volume	Catalog #	Volume
04-RT-005	5 mL	04-RTB-015	15 mL
04-RT-010	10 mL	04-RTB-030	30 mL
04-RT-050	50 mL	04-RTB-150	150 mL

Sample Size: 04-RT-010 = 10 mL of IMCSzyme RT and a free 15 mL Room Temperature Buffer



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