



Get the **FACTS**

Science with Integrity

IMCSzyme[®] RT

genetically modified β -glucuronidase

- **15-minute** room temperature urine hydrolysis.¹⁻⁶
- **Verified with real** pain care samples and not spiked, synthetic urine.¹⁻⁶
- **Patient-specific** urine properties **negatively impact β -glucuronidase enzymes** to varying levels, lowering analyte recoveries.^{1,2,4} IMCSzyme[®] RT is **8 to 10x more resistant** to inhibitors.²
- **Blended Enzymes** enable more efficient hydrolysis to reduce false negatives.^{1,2,4}
- **Ten-fold** less enzyme required to complete hydrolysis.⁵
- Master mix prepared with IMCSzyme[®] RT is **stable for one month at room temperature** during work hours and stored at 4 °C at the end of the shift.⁶
- **More resistant to pH extremes** in urine samples than other β -glucuronidase enzymes.¹

LEARN MORE AT

www.imcstips.com/IMCSzyme-RT



1. Lee LA, McGee AC, Sitasuwan P, Tomashek JJ, Riley C, Muñoz-Muñoz AC, Andrade L. (2021). Factors Compromising Glucuronidase Performance in Urine Drug Testing Potentially Resulting in False Negatives. *Journal of Analytical Toxicology*, DOI: 10.1093/jat/bkab090.
2. McGee AC, Sitasuwan PN, Tomashek JJ, Munoz-Munoz AC, Andrade L, Lee LA. (2021). Overcoming Heterogeneity in Urine Specimens: Avoiding False Negatives caused by Endogenous Inhibitors. Annual Meeting, *Society of Forensic Toxicologists*, Nashville, TN. September 26 - October 1, 2021.
3. Grenier AC. (2020). Comparing Glucuronidase Hydrolysis Efficiencies in Patient Urine Samples. SOFTember Virtual Program, *Society of Forensic Toxicologists*, [Online]. September 9-30, 2020.
4. McGee AC, Sitasuwan PN, Tomashek JJ, Schlachter CR, Grenier AC, Andrade L, Lee LA. (2020). Urine Variability Compromises β -Glucuronidase Performance Causing Inaccurate Drug Quantitation. SOFTember Virtual Program, *Society of Forensic Toxicologists*, [Online]. September 9-30, 2020.
5. Sasaki TA. (2019). Simplifying Urine Drug Testing with “Flash Hydrolysis” Using New Recombinant β -Glucuronidase Enzymes. Annual Meeting, *Society of Forensic Toxicologists*, San Antonio, TX. October 13-18 2019.
6. IMCSzyme RT Master Mix Stability. (2021). [Online]. Accessed March 29, 2022.