

# **Gabapentin Forensic ELISA Kit**

## **Clear Performance and Trusted Results**

Neogen now offers a unique ELISA screening tool optimized for oral fluid, urine, and blood/serum — delivering clear performance and trusted results.

Our gabapentin immunoassay delivers a reliable and streamlined approach to detecting this drug, helping forensic laboratories expand their screening capabilities with confidence.

### **Background**

Gabapentin is a medication primarily prescribed for seizure disorders and neuropathic pain. A growing concern has emerged around its misuse for recreational purposes. Although gabapentin is not classified as a controlled substance at the federal level in the U.S., some states have passed their own laws classifying gabapentin as a schedule V controlled substance.

The rationale for testing gabapentin has become increasingly urgent due to its rising misuse. At high doses, gabapentin can induce euphoria, sedation, and dissociative effects — similar to those produced by opioids and benzodiazepines — making it attractive for recreational use. Additionally, gabapentin is frequently used in combination with opioids to enhance their psychoactive effects, which substantially increases the risk of respiratory depression and overdose.

As gabapentin misuse continues to escalate, forensic laboratories must evolve their testing capabilities to keep pace. Our forensic ELISA provides a reliable and efficient tool to detect gabapentin, enabling laboratories to deliver more comprehensive screen solutions.

## **High Specificity and Sensitivity**

- Kit is optimized to detect gabapentin
- Minimal cross-reactivity with structurally similar compounds, ensuring accurate test results

## **Adaptable Testing**

- Validated for multiple matrices, including: oral fluid, whole blood, serum, and urine
- Flexible detection thresholds to meet your program's needs

#### **Efficient Workflow**

- With only minimal training required, our simple assay process means less wasted time and resources within your lab
- Our forensic experts provide validation assistance and comprehensive technical support every step of the way

#### **Cross Reactivity Table**

Compound	Compound Concentration (ng/mL)	Gabapentin Equivalents (ng/mL)	% Cross Reactivity
Gabapentin	11	11	100
Pregabalin methyl ester	117	11	9.4
(-)-Levamisole	244	11	4.5
Gabapentin Enacarbil	256	11	4.3
Pyrantel	583	11	1.9
Pregabalin	1,020	11	1.1
R(-)-Methamphetamine	7,630	11	0.1

Note: Gabapentin equivalents represent 50% B/B<sub>o</sub> assay displacement in EIA Buffer.

Product	Available Sizes	Product Number
Gabapentin Forensic ELISA Kit	96-well	182419
Gabapentin Forensic ELISA KIT	480-well	182415

#### References

Evoy, K. E., Morrison, M. D., & Saklad, S. R. (2017). Abuse and misuse of gabapentin: A systematic review. Addictive Behaviors, 73, 109–123. https://doi.org/10.1016/j.addbeh.2017.05.016

Smith, R. V., Havens, J. R., & Walsh, S. L. (2016). Gabapentin misuse, abuse and diversion: A systematic review. Addictive Behaviors, 61, 87–93. https://doi.org/10.1016/j.addbeh.2016.05.014

Reeves, R. R., Burke, R. S. (2014). Clinical issues in the pharmacologic treatment of substance use disorders with gabapentin. Journal of Clinical Psychiatry, 75(6), 567–574.https://pubmed.ncbi.nlm.nih.gov/25004174

Steinman, M. A., et al. (2019). Gabapentin use in U.S. nursing homes. Journal of the American Geriatrics Society, 67(8), 1738–1744.https://doi.org/10.1111/ies.15995

