



## Anti-cotinine Human Monoclonal Antibody

SKU: EAB-018

Recombinant human monoclonal antibody (Clone ID: B3), expressed in Chinese Hamster Ovary cells (CHO), is capable of strong binding to cotinine. Cotinine is an alkaloid found in tobacco and is also a metabolite of nicotine. Cotinine is used as a biomarker for exposure to tobacco smoke. Cotinine was developed as an antidepressant as cotinine fumarate, sold under the brand name Scotine.

|                    |                                                 |
|--------------------|-------------------------------------------------|
| species reactivity | independent                                     |
| recombinant        | expressed in Chinese Hamster Ovary cells (CHO). |
| applications       | WB, Flow Cyt, IHC, ELISA, functional study      |
| antibody form      | affinity purified immunoglobulin                |
| immunogen          | hapten cotinine                                 |
| clone              | B3                                              |
| purity             | >95% (SDS-PAGE)                                 |
| form               | 0.015 M PBS, 0.05% NaN <sub>3</sub> , pH7.2     |
| concentration      | ~ 2 mg/ml                                       |
| isotype            | Human Ig2, k                                    |
| Fc-engineered      | n/a; wild type Fc                               |

- Store at -20°C. Recombinant monoclonal antibodies are guaranteed stable for 12 months when properly stored.

### References:

1. Park, S., Hwang, D., Chung, J. (2012). Cotinine-conjugated aptamer/anti-cotinine antibody complexes as a novel affinity unit for use in biological assay. *Exp. Mol. Med.* 44, 554-561.
2. Yoon, S. M., Kim, Y.H., Kang, S.H., et al. (2014). Bispecific Her2 X cotinine antibody in combination with cotinine-(histidine)<sub>2</sub>-iodine for the pre-targeting of Her2-positive breast cancer xenografts. *J Cancer Res. Clin. Oncol.* 140, 227–233.
3. Oyama, H., Morita, I., Kiguchi, Y. et al. (2017). One-shot in vitro evolution generated an antibody fragment for testing urinary cotinine with more than 40-fold enhanced affinity. *Anal. Chem.* 89, 988–995.
4. Lazar et al. (2006). Engineered antibody Fc variants with enhanced effector function. *Proc. Natl. Acad. Sci. USA* 103, 4005–4010.