



## Anti-cotinine Human Monoclonal Antibody, Fc-engineered with Increased ADCC

SKU: EAB-012

Recombinant Human Antibody (Clone ID: SUN10), 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	SUN10
purity	>95% (SDS-PAGE)
form	0.015 M PBS, 0.05% NaN <sub>3</sub> , pH7.2
concentration	~ 2 mg/ml
isotype	human IgG1, k
Fc-engineered	Increased ADCC

- 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.