



Monoclonal Antibody against Human Lipocalin-2 (2G1)

Catalog Number: 21050**Size: 100 µg****Host: Mouse**

Introduction to the Molecule

Lipocalin-2 (LCN2), also known as neutrophil gelatinase-associated lipocalin (NGAL), 24p3, or neutrophil lipocalin (NL), is a 25-kDa secretory glycoprotein¹. LCN2 has been implicated in a variety of cellular processes including the innate immune response, differentiation, tumorigenesis, and cell survival²⁻³. It appears to be upregulated in various inflammation and infection conditions. Several reports suggest that LCN2 may represent a sensitive biomarker for various renal injuries⁴ and is associated with several types of cancers, including breast cancer⁵, ovarian, colorectal, and pancreatic cancers⁶⁻⁷. Furthermore, a growing body of evidence suggests that serum levels of LCN2 are correlated with obesity, insulin resistance, hyperglycemia, coronary heart disease and fatty liver disease in humans⁸⁻¹¹.

Purification

Protein G affinity purification

Immunogen

Recombinant full-length human lipocalin-2 (Cat. No: 41050) in *E.coli*.

Specificity

The antibody detects human LCN2.

Formulation & Storage

Liquid in phosphate-buffered saline (PBS). Store at -20°C for less than one week. For long-term storage, aliquot and freeze at -70°C. Avoid repeated freeze/thaw cycles.

Application/Usage

This antibody can be used as a capture antibody in a human lipocalin-2 ELISA in combination with monoclonal anti-human lipocalin-2 antibody clone 2C3 (Cat. No.: 21051) as detection antibody.

References

- [1] Kjeldsen, L. et al. (1993) J. Biol. Chem. 268:10425-32
- [2] Yang, J. et al. (2002) Mol. Cell. 10:1045-56.
- [3] Flo, T.H. et al. (2004) Nature 432:917-21.
- [4] Mishra, J. et al. (2005) Lancet 365:1231-6.
- [5] Yang, J. et al. (2009) Proc Natl Acad Sci U S A 106(10):3913-8.
- [6] Hanai, J. et al. (2005) J. Biol. Chem. 280:13641-7.
- [7] Lee, H.J. et al. (2005) Int. J. Cancer 118:2490-7.
- [8] Wang Y, et al. (2007) Clin Chem 53(1):34-41.
- [9] Yan QW, et al. (2007) Diabetes 56(10):2533-40.
- [10] Ruby LC Hoo, et al. (2008) Expert Rev. Endocrinol Metal 3(1):29-41.
- [11] Milner KL, et al. Hepatology [Epub ahead of print].