



Monoclonal Anti-human CXCL1/2/3/GRO Pan Specific Antibody

ORDERING INFORMATION

Catalog Number: MAB2761

Clone: 29702

Lot Number: XEO01

Size: 100 µg

Formulation: 0.2 µm filtered solution in
Tris/NaCl with 5% trehalose

Storage: -20° C

Reconstitution: sterile PBS

Specificity: human CXCL1/2/3

Immunogen: *E. coli*-derived rhCXCL3

Ig class: mouse IgG₁

Recommended Applications:

Western blot
Flow cytometry

Other Application:

Direct ELISA

Preparation

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, *E. coli*-derived, recombinant human CXCL3 (rhCXCL3). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography. CXCL1, CXCL2, and CXCL3, also known respectively as GRO α , GRO β (MIP-2 α) and GRO γ (MIP-2 β), are members of the CXC subfamily of chemokines. Mature CXCL1/2/3 proteins bind with high affinity to the IL-8 receptor type B and are potent neutrophil attractants and activators.

Formulation

Lyophilized from a 0.2 µm filtered solution in 20 mM Tris and 0.3 M NaCl, pH 8.0 with 5% trehalose.

Reconstitution

Reconstitute with sterile PBS. If 0.2 mL of PBS is used, the antibody concentration will be 500 µg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody recognizes human CXCL1, human CXCL2 and human CXCL3 (hCXCL1/2/3). In direct ELISAs this antibody shows 100% cross-reactivity with rmCXCL2 and no cross-reactivity with rhVIC, rmVIC, rhCCL3L1, rhCCL4L1 or rcaLL-8.

Applications

Western Blot - This antibody can be used at 1 - 2 µg/mL with the appropriate secondary reagents to detect human CXCL1/2/3. Using a colorimetric detection system, the detection limit for rhCXCL3 is approximately 25 ng/lane under non-reducing conditions. Use of this antibody under reducing conditions is not recommended. Chemiluminescent detection with WesternGlo Chemiluminescent Detection Substrate (R&D Systems, Catalog # AR004) will increase sensitivity by 5 to 50 fold.

Flow Cytometry - Dilute this antibody to 25 µg/mL and add 10 µL of the diluted solution to 1 - 2.5 x 10⁵ cells in a total reaction volume not exceeding 200 µL. The binding of unlabeled monoclonal antibodies may be visualized by adding 10 µL of a 25 µg/mL stock solution of a secondary developing reagent such as goat anti-mouse/rat IgG conjugated to a fluorochrome.

Direct ELISA - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect human CXCL1/2/3. The detection limit for rhCXCL3 is approximately 10 ng/well.

Optimal dilutions should be determined by each laboratory for each application.