

Monoclonal Antibody CD162

PN IM2090 – Purified – Freeze-dried – 0.2 mg – Clone 3E2-25-5 (PL1)

For Research Use Only. Not for use in diagnostic procedures.

SPECIFICITY

The CD162 antigen also called Human P-Selectin Glycoprotein Ligand 1 (PSGL-1) is a 120 kDa mucin-like glycoprotein forming homodimers and is a high-affinity ligand for P-selectin (CD62P) (1-3). Studies using 3E2-25-5 (PL1) and 5D8-8-12 (PL2) monoclonal antibodies (mAb) have shown that CD162 is the major counter-receptor for P-selectin to mediate neutrophil initial attachment and rolling on activated vascular endothelium, both *in vitro* (4, 5) and *in vivo* (6).

In peripheral blood, 3E2-25-5 mAb reacts with monocytes, granulocytes, T cells and a subset of B cells. It does not react with erythrocytes and resting or thrombin activated platelets (4).

3E2-25-5 mAb is a blocking antibody since it inhibits the binding of P-selectin to PSGL-1 in a variety of assays (2, 5).

The 3E2-25-5 (PL1) was assigned to the CD162 cluster of differentiation at the VIth International Workshop on Human Leukocyte Differentiation Antigens held in 1996 in Kobe, Japan (7).

REAGENT

Monoclonal Antibody CD162

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– Freeze-dried – 0.2 mg

Clone 3E2-25-5 (PL1)

Isotype IgG1

Species Mouse

Immunogen Human neutrophils

Hybridoma X63-Ag8.653 x Balb/c spleen cells

Source Ascites fluid

Purification Ion exchange or affinity chromatography

Buffer 1 mg/mL bovine serum albumin in phosphate-buffered saline

APPLICATION

Studies of CD162 positive cells.

Flow cytometry

STATEMENT OF WARNINGS

1. Specimens, samples and all material coming in contact with them should be handled as if capable of transmitting infection and disposed of with proper precautions.
2. Never pipet by mouth and avoid contact

of samples with skin and mucous membranes.

3. Do not use antibody beyond the expiration date on the label.
4. Avoid microbial contamination of reagents or incorrect results might occur.
5. Use good laboratory practices when handling this reagent.

STORAGE CONDITIONS AND STABILITY

This freeze-dried form may be stored at 2 – 8°C until the expiration date stated on the vial label. No preservative has been added.

REAGENT PREPARATION

Depending of usage, reconstitute with 1 mL of distilled water, with or without 0.1% sodium azide (w/v).

The reconstituted form including 0.1% sodium azide may be stored for up to one month at 2 – 8°C.

The reconstituted form without sodium azide can be stored at –20°C or less, until the expiration date stated on the vial label.

In this case, aliquotting is recommended to avoid multiple freezing / thawing cycles.

PROCEDURE

For each application, it is recommended to establish the right range of antibody dilutions to be used for the experiment.

SELECTED RESEARCH

REFERENCES

1. Sako, D., Chang, X.-J., Barone, K.M., Vachino, G., White, H.M., Shaw, G., Veldman, G.M., Bean, K.M., Ahern, T.J., Furie, B., Cumming, D.A., Larsen, G.R., "Expression cloning of a functional glycoprotein ligand for P-selectin", 1993, *Cell*, 75, 1179-1186.
2. Doré, M., Burns, A.R., Hughes, B.J., Entman, M.L., Smith, C.W., "Chemoattractant-induced changes in surface expression and redistribution of a functional ligand for P-selectin on neutrophils", 1996, *Blood*, 87, 2029-2037.
3. Kansas, G.S., "Selectins and their ligands: current concepts and controversies", 1996, *Blood*, 88, 3259-3287.

4. Moore, K.L., Patel, K.D., Bruehl, R.E., Fugang, L., Johnson, D.A., Lichenstein, H.S., Cummings, R.D., Bainton, D.F., McEver, R.P., "P-selectin glycoprotein Ligand-1 mediates rolling of human neutrophils on P-selectin", 1995, *J. Cell Biol.*, 128, 661-671.
5. Tu, L., Chen, A., Delahunty, M.D., Moore, K.L., Watson, S.R., McEver, R.P., Tedder, T.F., "L-selectin binds to P-selectin glycoprotein ligand-1 on leukocytes - Interactions between the lectin, epidermal growth factor, and consensus repeat domains of the selectins determine ligand binding specificity", 1996, *J. Immunol.*, 157, 3995-4004.
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7. Goda, K., Tanaka, T., Takeuchi, E., Miyasaka, M., "CD162 (PSGL-1) workshop panel report", 1997, in *Leukocyte Typing VI, White Cell Differentiation Antigens*. Kishimoto, T., et al., Eds., Garland Publishing Inc., 454-457.

PRODUCT AVAILABILITY

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