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CD64 (125-374): sc-4370 WB

BACKGROUND

Three different classes of IgG Fc receptors have been described: FcγRI (CD64), FcγRII (CD32) and FcγRIII (CD16). The low affinity receptors, FcγRII and FcγRIII, have a putative role in mediating humoral immune responses. FcγRI is a 70 kDa cell surface glycoprotein with high affinity for monomeric IgG, is expressed constitutively on monocytes and macrophages and can be induced in neutrophils subsequent to IFN- γ stimulation. FcγRI plays a putative role in the initiation of cell-mediated cytotoxicity. Thus far, three genes encoding four distinct FcγRI transcripts have been described. FcγRI has been shown to associate with signal transducing subunit of the high affinity IgE receptor. Src family kinases Hck and Lyn show increased kinase activity and will co-immunoprecipitate with FcγRI subsequent to receptor cross linking.

REFERENCES

1. Porges, A.J., Redecha, P.B., Doebele, R., Pan, L.C., Salmon, J.E., and Kimberly, R.P. 1992. Novel Fc γ receptor I family gene products in human mononuclear cells. *J. Clin. Investigation* 90: 2102-2109.
2. Valerius, T., Repp, R., de Wit, T.P., Berthold, S., Platzer, E., Kalden, J.R., Gramatski, M., and van de Winkel, J.G. 1993. Involvement of the high-affinity receptor for IgG (FcγRI; CD64) in enhanced tumor cell cytotoxicity of neutrophils during granulocyte colony-stimulating factor therapy. *Blood* 82: 931-939.
3. Wang, A.V., Scholl, P.R., and Geha, R.S. 1994. Physical and functional association of the high affinity immunoglobulin G receptor (FcγRI) with the kinases Hck and Lyn. *J. Exp. Med.* 180: 1165-1170.
4. Hulett, M.D., Witort, E., Brinkworth, R.I., McKenzie, I.F., and Hogarth, P.M. 1995. Multiple regions of human Fc γ RII (CD32) contribute to the binding of IgG. *J. Biol. Chem.* 270: 21188-21194.
5. Engelhardt, W., Matzke, J., and Schmidt, R.E. 1995. Activation-dependent expression of low affinity IgG receptors Fc γ RII (CD32) and Fc γ RIII (CD16) in subpopulations of human T lymphocytes. *Immunobiology* 192: 297-320.
6. Capsoni, F., Minonzio, F., Ongari, A.M., Carbonelli, V., Galli, A., and Zanussi, C. 1995. IL-10 up-regulates human monocyte phagocytosis in the presence of IL-4 and IFN- γ . *J. Leukoc. Biol.* 58: 351-358.
7. Beekman, J.M., Bakema, J.E., van de Winkel, J.G., Leusen, J.H. 2004. Direct interaction between FcγRI (CD64) and periplakin controls receptor endocytosis and ligand binding capacity. *Proc. Natl. Acad. Sci. USA* 101: 10392-10397
8. Qin, H., Edberg, J.C., Gibson, A.W., Page, G.P., Teng, L., Kimberly, R.P. 2004. Differential gene expression modulated by the cytoplasmic domain of Fc γ RI α (CD64) α -chain. *J. Immunol.* 173: 6211-6219.
9. Holl, V., Hemmerter, S., Burrer, R., Schmidt, S., Bohbot, A., Aubertin, A.M., Moog, C. 2004. Involvement of Fc γ RI (CD64) in the mechanism of HIV-1 inhibition by polyclonal IgG purified from infected patients in cultured monocyte-derived macrophages. *J. Immunol.* 173: 6274-6283.

SOURCE

CD64 (125-374) is expressed in *E. coli* as a 55 kDa tagged fusion protein corresponding to amino acids 125-374 of CD64 of human origin.

PRODUCT

CD64 (125-374) is purified from bacterial lysates (>98%) by column chromatography; supplied as 10 μ g protein in 0.1 ml SDS-PAGE loading buffer.

APPLICATIONS

CD64 (125-374) is suitable as a Western blotting control for sc-15364.

STORAGE

Store at -20° C; stable for one year from the date of shipment.

RESEARCH USE

For research use only, not for use in diagnostic procedures.