

BACKGROUND

Interleukin 1 (IL-1) consists of two proteins, IL-1 α and IL-1 β , which are the products of distinct genes, but which recognize the same cell surface receptors. IL-1 α and IL-1 β show approximately 25% identity in the amino acid sequence.¹⁾ Both IL-1 α and IL-1 β are synthesized as 31K Da precursors that are subsequently cleaved into proteins with molecular weights of approximately 17KDa.^{2,3)} Among various species, the amino acid sequences of mature IL-1 α is conserved 60% to 70%, while that of the mature IL-1 β is conserved 75% to 78%.⁴⁾ Both IL-1 α and IL-1 β have glycosylation sites, but non-glycosylated recombinant products have biological activities similar to the naturally occurring forms of the molecules.^{5,6)}

IMMUNOGEN: Recombinant IL-1 α (Rat)
for ELISA: Approximately 0.02-0.05ng/well of recombinant rat IL-1 α can be detected using an antiserum concentration of dilution ratio x10000.
for WESTERN BLOTTING: An antiserum concentration of dilution ratio x1000 will allow visualization of 0.01-0.003ng/lane of recombinant rat IL-1 α under reducing condition.

SPECIFICITY: IL-1 α (Rat) 100%, IL-1 α (Human) 24.8%
IL-1 β (Rat) <0.01%, IL-1 β (Human) <0.01%
TNF- α (Rat) <0.01%, TNF- α (Human) <0.01%
Other Cytokines <0.01%

RELATED ANTISERA: Goat Anti IL-1 α (Rat) Serum YC 011
Rabbit Anti IL-1 β (Rat) Serum YC 020
Goat Anti IL-1 β (Rat) Serum YC 021
Anti IL-1 β (Rat) Monoclonal Antibody YC 022

RELATED PEPTIDES: IL-1 β , TNF- α , TNF- β , Other Cytokines

STORAGE: Keep frozen below -20°C
Avoid repeated freezing-thawing

REFERENCES:

- 1) Oppenheim JJ. et al., Immunol. Today, 7:45, 1986
- 2) Giri JG, Lomedico PT, Mizel SB., J. Immunol. 134: 343-349, 1985
- 3) DJ Hazuda, J Strickler, F Kueppers, PL Simon, and PR Young., J. Biol. Chem., 265: 6318-6322, 1990
- 4) Dodds RA, Merry K, Littlewood A, Gowen M. J., Histochem. Cytochem., 42: 733-744, 1994
- 5) Dinarello CA., Blood, 77:1627-1652, 1991
- 6) Casagli MC, Borri MG, Bigio M, Rossi R, Nucci D, Bossu P, Boraschi D, Antoni G. Biochem Biophys Res Commun., 162: 357-363, 1989

FOR RESEARCH LABORATORY USE ONLY

DO NOT USE ORGANIC SOLVENTS FOR DISSOLVING ANTISERUM