

Rat GRO/CINC

CXC Chemokine (IL-8 Family)

Growth Related Oncogene (GRO) /Cytokine-induced neutrophil chemo attractant 1 (CINC-1) was originally purified from media conditioned by IL-1 β stimulated rat kidney epithelioid cells (NRK-52E). Amino acid sequence that encodes for rat CINC-1 was identified in 1989 by Watanabe's group at Toyama Medical and Pharmaceutical University. CINC-1 is a member of the alpha (CXC) subfamily of chemokines. Three additional rat CXC chemokines (CINC-2 α , CINC-2 β , CINC-3/MIP-2) have been identified. The protein sequence of CINC-1 is 63 - 67% identical to that of CINC-2 α , CINC-2 β , CINC-3/MIP-2. In addition, GRO α , GRO β and GRO γ is sharing 68%, 71% and 69%, identity with CINC-1. This has been suggested that CINC-1 is the rat counterpart of human GROs.

Correlation between human and rodent CXC chemokines

	Human	Rat	Mouse
	IL-8	Unknown	Unknown
CXC Chemokines	GRO α (MGSA) GRO β GRO γ	CINC-1	KC
		CINC-2 α	Unknown
		CINC-2 β	
		CINC-3	MIP-2

IL : Interleukine
GRO : Growth Related Oncogene
CINC : Cytokine-Induced Neutrophil Chemoattractant
KC : Keratinocyte-derived Cytokine
MIP-2 : Macrophage Inflammatory Protein-2

Rat GRO/CINC ELISA Kits

Code No.	Name	Volume	Assay range	Sample Volume	Assay Time	Specificity and Comments
27162	Rat GRO/CINC-1 ELISA Kit	96 well	4.69 ~ 300 pg/mL	100 μ L	1st Reaction 37°C, 1Hr or 4°C, over night 2nd Reaction 37°C, 30min	Not cross react with Rat GRO/CINC-2 α , -2 β , and -3
17170	Rat GRO/CINC-2 α ELISA Kit	96 well	9.38 ~ 600 pg/mL	100 μ L	1st Reaction 37°C, 1Hr 2nd Reaction 37°C, 30min	Not cross react with Rat GRO/CINC-1, -2 β , and -3
17166	Rat GRO/CINC-2 β ELISA Kit	96 well	9.38 ~ 600 pg/mL	100 μ L	1st Reaction 37°C, 1Hr 2nd Reaction 37°C, 30min	Not cross react with Rat GRO/CINC-1, -2 α , and -3
27163	Rat GRO/CINC-3 ELISA Kit	96 well	4.69 ~ 300 pg/mL	100 μ L	1st Reaction 37°C, 1Hr or 4°C, over night 2nd Reaction 4°C, 30min	Not cross react with Rat GRO/CINC-1, -2 α , and -2 β

Related ELISA Kits

Code No.	Name	Volume	Assay range	Sample Volume	Assay Time	Specificity and Comments
27139	Human GRO α /MGSA ELISA Kit	96 well	3.13 ~ 200 pg/mL	100 μ L	1st Reaction 37°C, 1Hr 2nd Reaction 37°C, 30min	Not cross react with Human GRO β and γ
27142	Human GRO β ELISA Kit	96 well	19.53 ~ 2,500 pg/mL	100 μ L	1st Reaction 4°C, over night 2nd Reaction 37°C, 30min	Not cross react with Human GRO α and γ
27137	Mouse KC ELISA Kit	96 well	23.44 ~ 1,500 pg/mL	100 μ L	1st Reaction 37°C, 1Hr 2nd Reaction 37°C, 30min	Not cross react with Mouse MIP-2
27138	Mouse MIP-2 ELISA Kit	96 well	1 ~ 64 pg/mL	100 μ L	1st Reaction 37°C, 1Hr or 4°C, over night 2nd Reaction 4°C, 30min	Not cross react with Mouse KC

Manufacturer :

Immuno-Biological Laboratories Co., Ltd.
5-1 Aramachi, Takasaki-shi, Gunma 370-0831, JAPAN
TEL: 027-310-8040
FAX: 027-310-8045
E-mail: do-ibl@ibl-japan.co.jp
URL: <http://www.ibl-japan.co.jp>



Distributed By:

Immuno-Biological Laboratories, Inc. (IBL-America)
8201 Central Ave NE, Suite P, Minneapolis, MN 55432
Phone: (888) 523-1246
Fax: (763) 780-2988
Email: info@ibl-america.com
Website: www.ibl-america.com

Rat GRO/CINC Antidodies							*F/P: Formalin fixed Paraffin embedded
Code No.	Name			Volume	IHC (*F/P)	WB	Specificity and comments
18251	Anti-Rat	GRO/CINC-1	Rabbit IgG Affinity Purify	500 ug	○ 10-20 ug/mL	○ 10-20 ug/mL	Cross-reacts with Mouse KC.
18256	Anti-Rat	GRO/CINC-1 (C)	Rabbit IgG Affinity Purify	100 ug	—	○ 2-5 ug/mL	Inhibit migration of neutrophil (up to 6 nM) at 10 ug/mL
10071	Anti-Rat	GRO/CINC-1 (C) (6G2)	Mouse IgM MoAb	500 ug	—	○ 5-10 ug/mL	—
18257	Anti-Rat	GRO/CINC-1 (N)	Rabbit IgG Affinity Purify	100 ug	○ 2-5 ug/mL	○ 2-5 ug/mL	Inhibit migration of neutrophil (up to 6 nM) at 10 ug/mL
10072	Anti-Rat	GRO/CINC-1 (N) (2A9)	Mouset IgG MoAb	500 ug	—	○ 2-5 ug/mL	Inhibit migration of neutrophil at 100 ug/mL
18275	Anti-Rat	GRO/CINC-2 α (C)	Rabbit IgG Affinity Purify	100 ug	—	○ 1 ug/mL	—
18276	Anti-Rat	GRO/CINC-2 β (C)	Rabbit IgG Affinity Purify	100 ug	—	○ 2-5 ug/mL	—
18277	Anti-Rat	GRO/CINC-2 α , -2 β (N)	Rabbit IgG Affinity Purify	100 ug	—	○ 2-5 ug/mL	—
18291	Anti-Rat	GRO/CINC-3	Rabbit IgG Affinity Purify	500 ug	—	○ 2-5 ug/mL	Cross-reacts with Mouse MIP-2.
18292	Anti-Rat	GRO/CINC-3 (C)	Rabbit IgG Affinity Purify	100 ug	—	○ 2-5 ug/mL	—

Related Antibodies							*F/P: Formalin fixed Paraffin embedded
Code No.	Name			Volume	IHC (*F/P)	WB	Specificity and comments
18356	Anti-Human	GRO α /MGSA (C)	Rabbit IgG Affinity Purify	100 ug	○ 5-10 ug/mL	○ 2-5 ug/mL	Not cross-react to Human GRO β
18365	Anti-Human	GRO β (C)	Rabbit IgG Affinity Purify	100 ug	○ 5 ug/mL	○ 5 ug/mL	Not cross-react to Human GRO α
18361	Anti-Mouse	KC	Rabbit IgG ProteinA Purify	500 ug	○ 10-20 ug/mL	○ 10-20 ug/mL	Not cross-react to Human IL-8, GRO α
18366	Anti-Mouse	KC (C)	Rabbit IgG Affinity Purify	100 ug	○ 5 ug/mL	○ 1-5 ug/mL	Not cross-react to Human IL-8, GRO α
18367	Anti-Mouse	KC (N)	Rabbit IgG Affinity Purify	100 ug	○ 5 ug/mL	○ 1-5 ug/mL	Not cross-react to Human IL-8, GRO α
18296	Anti-Mouse	MIP-2	Rabbit IgG ProteinA Purify	100 ug	—	○ 2-5 ug/mL	Cross-reacts with Rat GRO/CINC-3
18297	Anti-Mouse	MIP-2 (C)	Rabbit IgG Affinity Purify	100 ug	—	○ 2-5 ug/mL	Cross-reacts with Mouse MIP-2

References :

- Yagihashi A. et al. Evaluation of serum IL-8 concentrations after orthotopic liver transplantation in rats. Transplantation Proceedings., 27(2), 1632-1633, 1995.
- Tsuruma T. et al. Evaluation of plasma IL-8 (CINC) concentration during ischemia and after reperfusion in the small intestine. Transplantation Proceedings., 28 (3), 1917-1918, 1996.
- Hashimoto S. et al. Depletion of alveolar macrophages decreases neutrophil chemotaxis to Pseudomonas airspace infection. American Journal of Physiology., 270, L819-L828, 1996.
- Himi T. et al. Production and Gene Expression of IL-8-like Cytokine GRO/CINC-1 in Rat Nasal Mucosa. ACTA OTO-LARYNGOLOGICA., 117 (1), 123-127, 1997.
- Yoshioka I. et al. In Vivo Induction and Regulation of Interleukin-8-Like Chemokine GRO/CINC-1 in Rat Middle Ear. ACTA OTO-LARYNGOLOGICA., 117 (5) , 719-723, 1997.
- Himi T. et al. Influence of age on the production of interleukin-8-like chemokine (GRO/CINC-1) in rat nasal mucosa. EUROPEAN ARCHIVES OF OTO-RHINO-LARYNGOLOGY., 254 (2), 101-104, 1997.
- Yamasaki Y. et al. New therapeutic possibility of blocking cytokine-induced neutrophil chemoattractant on transient ischemic brain damage in rats. Brain Research., 759 (1), 103-111, 1997.
- Utsunomiya, I. et al. Generation of inflammatory cytokines in zymosan-induced pleurisy in rats: TNF induces IL-6 and cytokine-induced neutrophil chemoattractant (CINC) in vivo. Cytokine., 10 (12), 956-963, 1998.
- Ohki, E. et al. Effect of chronic ethanol feeding on endotoxin-induced hepatic injury: role of adhesion molecules on leukocytes and hepatic sinusoid. Alcoholism Clinical and Experimental Research, 22 (3 Suppl), 129S-132S, 1998.
- Tsuruma T. et al. Anti-Rat IL-8 (CINC) Monoclonal Antibody Administration Reduces Ischemia-Reperfusion Injury in Small Intestine. Transplantation Proceedings., 30 (6), 2644-2645, 1998.
- Yagihashi A. et al. Prevention of small intestinal ischemia-reperfusion injury in rat by anti-cytokine-induced neutrophil chemoattractant monoclonal antibody. Journal of Surgical Research., 78 (2), 92-96, 1998.
- Amano H. et al. Role of cytokine-induced neutrophil chemoattractant-2 (CINC-2) α in a rat model of chronic bronchopulmonary infections with *Pseudomonas Aeruginosa*. Cytokine 12 (11), 1662-1668, 2000