Anti-CXCL1 / GRO alpha Antibody [PSH07-53] HA722841

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB
Molecular Wt:	Predicted band size: 11 kDa
Clone number:	PSH07-53

Description: Has chemotactic activity for neutrophils. May play a role in inflammation and exerts its effects on endothelial cells in an autocrine fashion. In vitro, the processed forms GRO-alpha(4-73), GRO-alpha(5-73) and GRO-alpha(6-73) show a 30-fold higher chemotactic activity. This antimicrobial gene encodes a member of the CXC subfamily of chemokines. The encoded protein is a secreted growth factor that signals through the G-protein coupled receptor, CXC receptor 2. This protein plays a role in inflammation and as a chemoattractant for neutrophils. Aberrant expression of this protein is associated with the growth and progression of certain tumors. A naturally occurring processed form of this protein has increased chemotactic activity. Alternate splicing results in coding and non-coding variants of this gene. A pseudogene of this gene is found on chromosome 4.

Immunogen: Recombinant protein within human CXCL1 aa 1-107.

Positive control: HUVEC treated with 0.5μg/mL LPS for 24 hours cell lysate, EA.hy926 treated with 0.5μg/mL LPS for 4 hours cell lysate, SK-OV-3 (Human ovarian cancer cell) cell lysates.

Subcellular location: Secreted.

Database links: SwissProt: P09341 Human

Recommended Dilutions:

WB	1:1,000-1:2,000

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

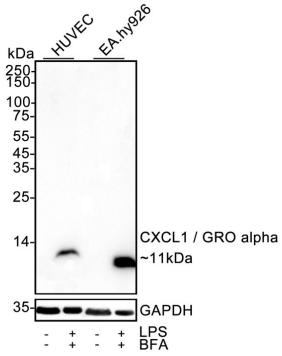


Fig1: Western blot analysis of CXCL1 / GRO alpha on different lysates with Rabbit anti-CXCL1 / GRO alpha antibody (HA722841) at 1/2,000 dilution.

Lane 1: HUVEC cell lysate
Lane 2: HUVEC treated with 0.5μg/mL LPS for 24 hours cell lysate, then add 300ng/mL BFA for 20 hours cell lysate
Lane 3: EA.hy926 cell lysate
Lane 4: EA.hy926 treated with 0.5μg/mL LPS for 4 hours cell lysate,
then add 300ng/mL BFA for 20 hours cell lysate

Lysates/proteins at 20 μg/Lane.

Predicted band size: 11 kDa
Observed band size: 11 kDa

Exposure time: 3 minutes; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA722841) at 1/2,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

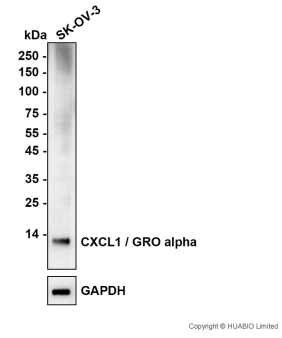


Fig2: Western blot analysis of CXCL1 / GRO alpha on SK-OV-3 (Human ovarian cancer cell) cell lysate with Rabbit anti-CXCL1 / GRO alpha antibody (HA722841) at 1/1,000 dilution.

Lysates/proteins at 10 μg/Lane.
Exposure time: 3 minutes; ECL: K18011

Blocking: 5% NFDM/TBST, 1 hour at room temperature
Primary antibody: HA722841, 1/1,000 in primary antibody dilution buffer (K1803), overnight at 4 ℃
Secondary antibody: Goat anti-Rabbit IgG-HRP (HA1001), 1/50,000 in 5% NFDM/TBST, 1 hour at room temperature

Predicted band size: 11 kDa
Observed band size: 11 kDa

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Collinson RJ, Mazza-Parton A, Fuller KA, Linden MD, Erber WN, Guo BB. Gene Expression of CXCL1 (GRO-α) and EGF by Platelets in Myeloproliferative Neoplasms. Hemasphere. 2020 Oct 26;4(6):e490. doi: 10.1097/HS9.0000000000000490. PMID: 33134870; PMCID: PMC7592996.
2. Zhou Y, Zhang J, Liu Q, Bell R, Muruve DA, Forsyth P, Arcellana-Panlilio M, Robbins S, Yong VW. The chemokine GRO-alpha (CXCL1) confers increased tumorigenicity to glioma cells. Carcinogenesis. 2005 Dec;26(12):2058-68. doi: 10.1093/carcin/bgi182. Epub 2005 Jul 20. PMID: 16033775.