

# Product Datasheet

## IL-12 Antibody - Low Endotoxin, Azide and BSA Free NB600-1443

Unit Size: 0.1 mg

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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**NB600-1443**

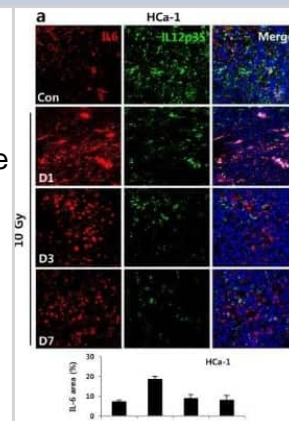
IL-12 Antibody - Low Endotoxin, Azide and BSA Free

Product Information	
Unit Size	0.1 mg
Concentration	Please see the vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	No Preservative
Isotype	IgG
Purity	Protein G purified
Buffer	Lyophilized from 0.2 um-filtered solution in phosphate buffered saline containing carbohydrates.
Product Description	
Host	Goat
Gene ID	3592
Gene Symbol	IL12A
Species	Mouse
Specificity/Sensitivity	Based on ELISA, the antibody shows ~10% cross-reactivity with recombinant human IL-12 and <5% cross-reactivity with recombinant porcine IL-12.
Immunogen	Purified, insect cell line Sf21-derived, recombinant mouse IL-12
Endotoxin Note	Endotoxin: <10 ng/vial by LAL method
Product Application Details	
Applications	Western Blot, ELISA, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Neutralization
Recommended Dilutions	Western Blot 1-2 ug/ml, ELISA 0.5-1 ug/ml, Immunohistochemistry 1:10-1:500, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry-Paraffin 1:10-1:500, Neutralization
Application Notes	ELISA: Sensitivity = 0.2 ng/well Neut: Achieving half of the neutralizing dose of a 0.3 ng/ml concentration of Mouse IL12 requires 0.012-0.2 ug/ml. WB: Predicted molecular weight: 39.4 kDa. Sensitivity = 1.5-3.0 ng/lane. Use in Immunohistochemistry on paraffin sections was reported in a scientific publication (PMID: 23666011). Use in Immunocytochemistry/immunofluorescence reported in scientific literature (PMID: 26745884).

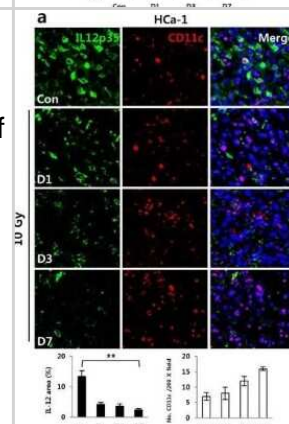


## Images

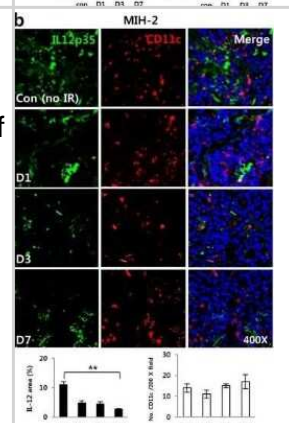
Immunohistochemistry: IL-12 Antibody [NB600-1443] - Irradiation-induced IL-6 suppressed IL-12 expression in tumors of hepatoma-bearing mice in vivo and DCs in vitro. IL-6 and IL-12 were measured at 1, 3, and 7 days after 10 Gy irradiation of tumors. Shown are the expressions of IL-6 and IL-12 in HCa-1 tumors (\*  $P < 0.05$ ). BMDCs were prepared from bone marrow of mice and stimulated with LPS. Image collected and cropped by CiteAb from the following publication (<https://dx.plos.org/10.1371/journal.pone.0146463>), licensed under a CC-BY license.



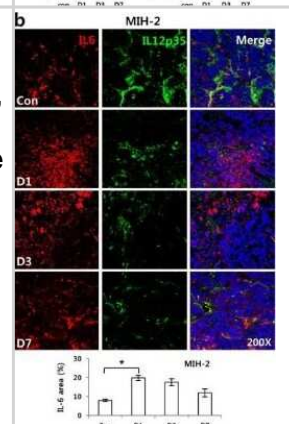
Immunohistochemistry: IL-12 Antibody [NB600-1443] - Irradiation inhibited IL-12 expression in tumors of hepatoma-bearing mice in vivo and DCs in vitro. HCa-1 and MIH-2 cells were injected intramuscularly into the right thighs of the mice, and tumors were irradiated with 10 Gy of radiation. Shown are IL-12 and DC (CD11c+) expressions at 1, 3, and 7 days after irradiation in HCa-1 tumors in the spleens of HCa-1 bearing mice (\*\*  $P < 0.01$ ). Image collected and cropped by CiteAb from the following publication (<https://dx.plos.org/10.1371/journal.pone.0146463>), licensed under a CC-BY license.



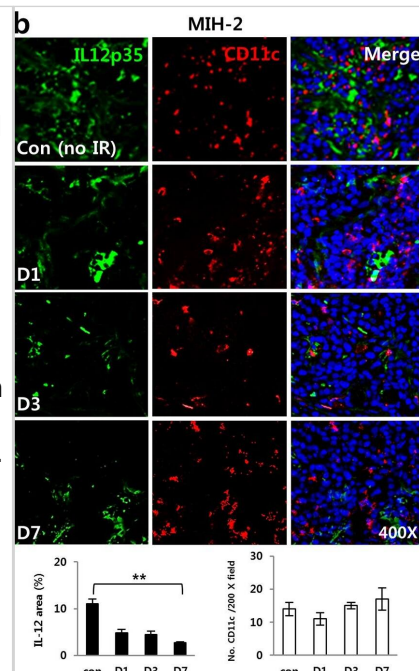
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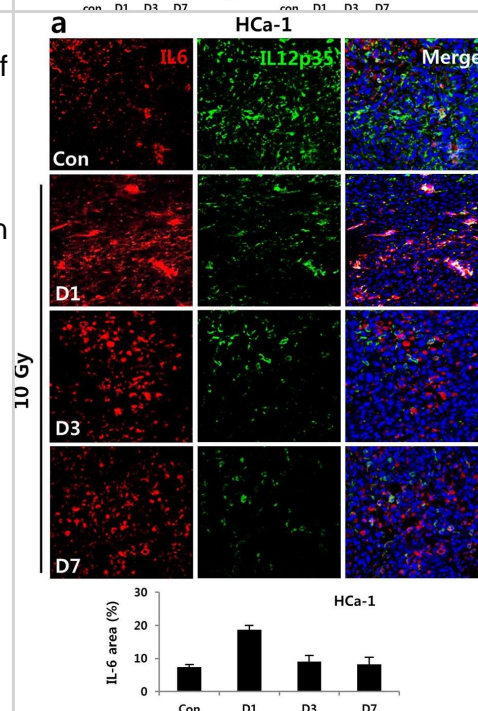
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**Immunocytochemistry/ Immunofluorescence: IL-12 Antibody [NB600-1443]** - Irradiation inhibited IL-12 expression in tumors of hepatoma-bearing mice in vivo & DCs in vitro. HCa-1 & MIH-2 cells were injected intramuscularly into the right thighs of the mice, & tumors were irradiated with 10 Gy of radiation. Shown are IL-12 & DC (CD11c+) expressions at 1, 3, & 7 days after irradiation in (a) HCa-1 & (b) MIH-2 tumors & (c) IL-12 expression in the spleens of HCa-1 bearing mice (\*\*  $P < 0.01$ ). (d) IL-12 expression in BMDCs incubated with supernatant of MIH-2 tumor cells or supernatant of 10 Gy irradiating MIH-2 tumor cells. (\*\*  $P < 0.01$ ). DCs were differentiated from bone marrow of C3H/HeN normal mice (BMDCs). These were incubated for 72 h in supernatant of MIH-2 tumor cells with or without 10 Gy irradiation. IL-12 was intracellularly stained with IL-12 antibody & analyzed by FACS. BMDCs also were stimulated with LPS (100 ng/mL) to allow maturation & irradiated with 10 Gy of radiation. (e) IL-12 expression (\*\*  $P < 0.01$ ), (f) cell viability, & (g) B7.1 expression in LPS stimulated BMDCs receiving 10 Gy radiation. (\*  $P < 0.05$ ). Data are from three independent experiments with five mice per group. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/26745884>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

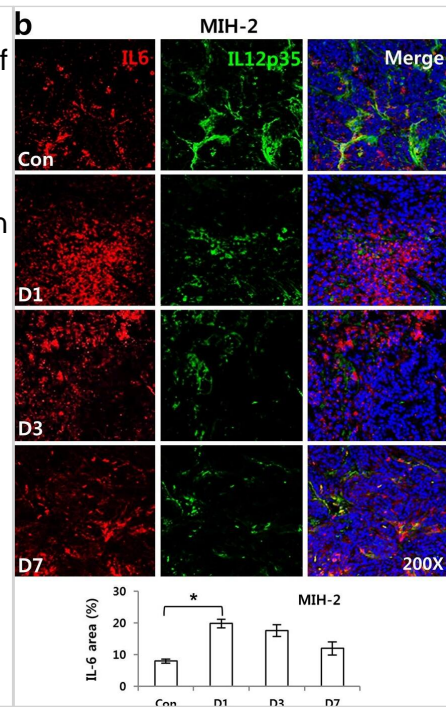


**Immunocytochemistry/ Immunofluorescence: IL-12 Antibody [NB600-1443]** - Irradiation-induced IL-6 suppressed IL-12 expression in tumors of hepatoma-bearing mice in vivo & DCs in vitro. IL-6 & IL-12 were measured at 1, 3, & 7 days after 10 Gy irradiation of tumors. Shown are the expressions of IL-6 & IL-12 in (a) HCa-1 & (b) MIH-2 tumors (\*  $P < 0.05$ ). BMDCs were prepared from bone marrow of mice & stimulated with LPS. (c) IL-6 expression analyzed at the indicated times by ELISA in irradiated or non-irradiated BMDCs in vitro. (d) IL-6R (\*\*  $P < 0.01$ , vs No IR) & (e) sIL6R (\*\*  $P < 0.01$ ) were evaluated at 2 day after 10 Gy irradiation to BMDCs by FACS & ELISA, respectively. BMDCs were treated without or with IL-6 (20 ng/mL) plus LPS. (f) Down regulation of IL-12 production by IL-6 treatment in BMDCs (\*\*  $P < 0.01$ ). BMDCs were stimulated with LPS for activation & cultured with or without anti-IL-6 antibody (final concentration of 500 ng/mL) during the indicated times after irradiation in vitro. IL-6 & IL-12 were analyzed by ELISA. (g) Recovery of IL-12 production & (h) B7-1/ B7-2 expression using an anti-IL-6 antibody in irradiated-BMDCs stimulated with LPS in vitro. (\*\*  $P < 0.01$ , \*  $P < 0.05$ ). Data are from three independent experiments. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/26745884>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

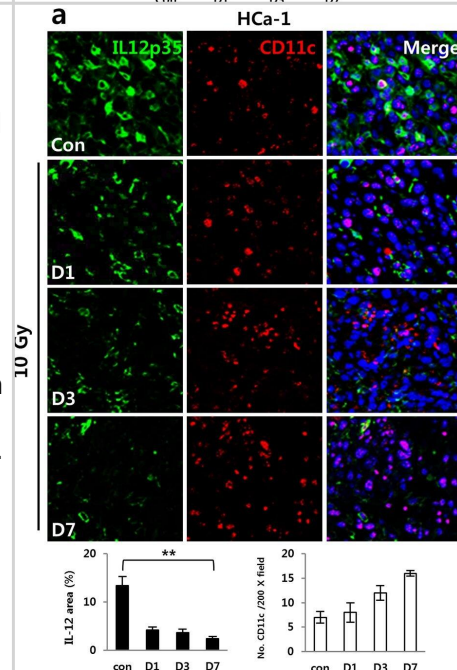




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## Publications

Zhang D, Chen Q, Bi Y et al. Bio-inspired poly-DL-serine materials resist the foreign-body response Nature communications 2021-09-07 [PMID: 34493717] (IF/IHC, Mouse)

Lee EJ, Lee SJ, Kim JH et al. Radiation Inhibits Interleukin-12 Production via Inhibition of C-Rel through the Interleukin-6/ Signal Transducer and Activator of Transcription 3 Signaling Pathway in Dendritic Cells. PLoS One 2016-01-08 [PMID: 26745884] (ICC/IF)

Zhang L, Cao Z, Bai T et al. Zwitterionic hydrogels implanted in mice resist the foreign-body reaction. Nat Biotechnol 2013-05-12 [PMID: 23666011] (IHC-P, Mouse)



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### **Products Related to NB600-1443**

HAF017	Rabbit anti-Goat IgG Secondary Antibody [HRP (Horseradish Peroxidase)]
HAF109	Donkey anti-Goat IgG Secondary Antibody [HRP (Horseradish Peroxidase)]
NB410-28088-1mg	Goat IgG Isotype Control
210-TA-005	TNF-alpha [Unconjugated]

### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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