# **Product Datasheet**

# Host Cell Factor 1/HCFC1 Antibody NB100-68209

Unit Size: 0.1 ml

Store at 4C. Do not freeze.

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**Publications: 5** 

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# NB100-68209

Host Cell Factor 1/HCFC1 Antibody

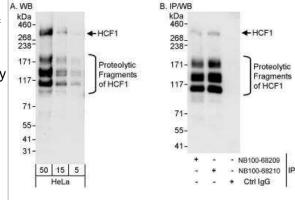
Product Information	
Unit Size	0.1 ml
Concentration	0.2 mg/ml
Storage	Store at 4C. Do not freeze.
Clonality	Polyclonal
Preservative	0.09% Sodium Azide
Isotype	lgG
Purity	Immunogen affinity purified
Buffer	TBS and 0.1% BSA

Product Description	
Description	Novus Biologicals Rabbit Host Cell Factor 1/HCFC1 Antibody (NB100-68209) is a polyclonal antibody validated for use in WB and IP. Anti-Host Cell Factor 1/HCFC1 Antibody: Cited in 5 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	3054
Gene Symbol	HCFC1
Species	Human
Immunogen	The immunogen recognized by this antibody maps to a region between residue 1700 and 1750 of human host cell factor C1 (VP16-accessory protein) using the numbering given in entry NP_005325.2 (GeneID 3054).

Product Application Details	
Applications	Western Blot, Immunoprecipitation, Knockdown Validated
	Western Blot 1:2000-1:10000, Immunoprecipitation 2-5 ug/mg lysate, Knockdown Validated

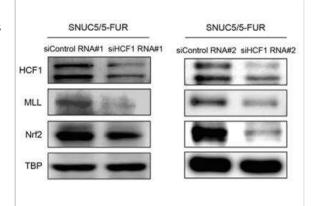
# **Images**

Western Blot: Host Cell Factor 1/HCFC1 Antibody [NB100-68209] - Samples: Whole cell lysate (5, 15 and 50 ug for WB; 1 mg for IP, 20% of IP loaded) from HeLa cells. Antibodies: Affinity purified rabbit anti-HCF1 antibody NB100-68209 used for WB at 0.04 ug/ml (A) and 1 ug/ml (B) and used for IP at 3 ug/mg lysate. HCF1 was also immunoprecipitated by rabbit anti-HCF1 antibody NB100-68210, which recognizes a downstream epitope. Detection: Chemiluminescence with exposure times of 30 seconds (A) and 10 seconds (B).



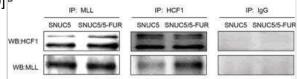
Western Blot: Host Cell Factor 1/HCFC1 Antibody [NB100-68209] - Expression pattern of HCF1, MLL, and Nrf2 in SNUC5/5-FUR cells was determined by Western blot analysis. Image collected and cropped by CiteAb from the following publication

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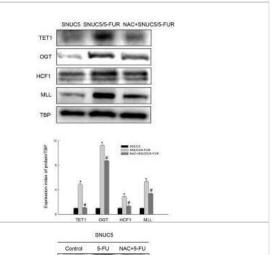
Immunoprecipitation: Host Cell Factor 1/HCFC1 Antibody [NB100-68209]

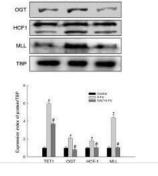
- Interaction between MLL and HCF1was examined by immunoprecipitation analysis using anti-MLL and anti-HCF1 antibodies followed by Western blotting with anti-HCF1 and anti-MLL antibodies. Image collected and cropped by CiteAb from the following publication (https://www.oncotarget.com/lookup/doi/10.18632/oncotarget.9745) licensed under a CC-BY license.



Western Blot: Host Cell Factor 1/HCFC1 Antibody [NB100-68209] - 5-FU-produced ROS involved in histone methyltransferase-mediated Nrf2 expression. E. Expression patterns of TET1, OGT, HCF1, & MLL in NAC pre-treated SNUC5/5-FUR cells determined by WB analysis. \*Significantly different from SNUC5 cells (p<0.05), & #significantly different from SNUC5/5-FUR cells (p<0.05). Also, SNUC5 cells pre-treated with 500  $\mu$ M of NAC & incubated for an additional 1 h at 37°. Cells then treated with 140  $\mu$ M 5-FU for 48 h. 10  $\mu$ M of DHR123 was added to plate & incubated for an additional 30 min at 37°C. Image collected & cropped by CiteAb from the following publication (https://www.oncotarget.com/lookup/doi/10.18632/oncotarget.9745), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

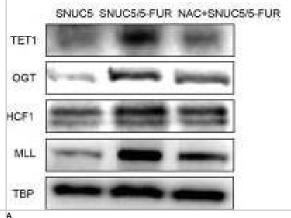
Western Blot: Host Cell Factor 1/HCFC1 Antibody [NB100-68209] - 5-FU-produced ROS involved in histone methyltransferase-mediated Nrf2 expression. J. Expression of TET1 & interaction proteins detected by WB analysis. \*Significantly different from SNUC5 cells (p<0.05), & #significantly different from 5-FU-treated SNUC5 cells (p<0.05). Image collected & cropped by CiteAb from the following publication (https://www.oncotarget.com/lookup/doi/10.18632/oncotarget.9745), licensed under a CC-BY license. Not internally tested by Novus Biologicals.





Western Blot: Host Cell Factor 1/HCFC1 Antibody [NB100-68209] - 5-FU-produced ROS involved in histone methyltransferase-mediated Nrf2 expression. F. The intracellular ROS level was detected by flow cytometry. Image collected & cropped by CiteAb from the following publication

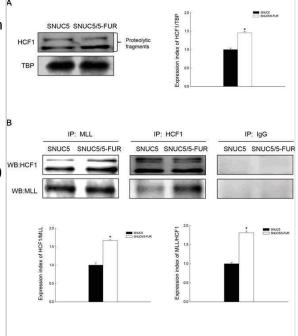
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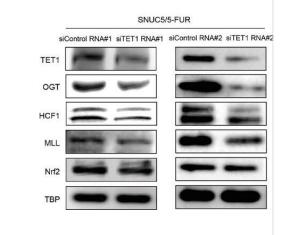


Western Blot: Host Cell Factor 1/HCFC1 Antibody [NB100-68209] -Effect of MLL-HCF1 interaction on histone methylation & Nrf2 expression in SNUC5/5-FUR cellsA. HCF1 expression was determined by Western blotting. \*Significantly different from SNUC5 cells (p<0.05). B. Interaction between MLL & HCF1was examined by immunoprecipitation analysis using anti-MLL & anti-HCF1 antibodies followed by Western blotting with anti-HCF1 & anti-MLL antibodies. \*Significantly different from SNUC5 cells (p<0.05). C. Interaction between MLL & HCF1was assessed by PLA. Each green spot represents for a single interaction (MLL & HCF1) & DNA was stained with DAPI. \*Significantly different from SNUC5 cells (p<0.05). The cells were transfected with non-targeting siRNA (siControl) or siHCF1 RNA for 24 h. D. Expression pattern of MLL mRNA in SNUC5/5-FUR cells was determined by RT-PCR analysis. \*Significantly different from siControl-transfected cells (p<0.05). E. Expression pattern of HCF1, MLL, & Nrf2 in SNUC5/5-FUR cells was determined by Western blot analysis. \*Significantly different from siControl-transfected cells (p<0.05). Image collected & cropped by CiteAb from the following publication

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Western Blot: Host Cell Factor 1/HCFC1 Antibody [NB100-68209] -Relation of OGT-TET1 interaction on histone methylation & Nrf2 expression in SNUC5/5-FUR cellsA. Interaction between OGT & TET1 was examined by immunoprecipitation analyses using anti-OGT & anti-TET1 antibodies followed by Western blotting with anti-TET1 & anti-OGT antibodies. B. Interaction between OGT & TET1 was assessed by using PLA. Each green spot represents for a single interaction (OGT & TET1) & DNA was stained with DAPI. \*Significantly different from SNUC5 cells (p<0.05). C. The O-GlcNAcylated TET1 or O-GlcNAcylated OGT was examined by immunoprecipitation analyses using anti-O-GlcNAc antibody followed by Western blotting with anti-TET1 & anti-OGT antibodies. The cells were transfected with non-targeting siRNA (siControl) or siOGT RNA or siTET1 RNA for 24 h. D. Expression pattern of OGT & TET1 in SNUC5/5-FUR cells was determined by Western blot analysis. \*Significantly different from siControl-transfected cells (p<0.05). E. Expression pattern of TET1, OGT, HCF1, MLL, & Nrf2 in SNUC5/5-FUR cells was determined by Western blot analysis. \*Significantly different from siControl-transfected cells (p<0.05). Image collected & cropped by CiteAb from the following publication (https://www.oncotarget.com/lookup/doi/10.18632/oncotarget.9745), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

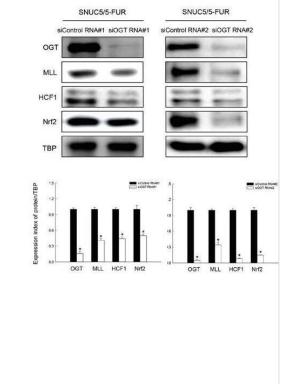






Western Blot: Host Cell Factor 1/HCFC1 Antibody [NB100-68209] -Involvement of OGT in histone methylase MLL/COMPASS-like complexmediated Nrf2 expression in SNUC5/5-FUR cellsA. OGT & O-GlcNAc expression was determined by Western blotting. \*Significantly different from SNUC5 cells (p<0.05). B. Interaction between HCF1 & OGT was examined by immunoprecipitation analysis using anti-HCF1 & anti-OGT antibodies followed by Western blotting with anti-HCF1 & anti-OGT antibodies. C. Interaction between HCF1 & OGT was assessed by using PLA. Each green spot represents for a single interaction (HCF1 & OGT) & DNA was stained with DAPI. \*Significantly different from SNUC5 cells (p<0.05). D. Interaction between MLL & OGT was examined by immunoprecipitation analysis using anti-MLL & anti-OGT antibodies followed by Western blotting with anti-OGT & anti-MLL antibodies. E. Interaction between MLL & OGT was assessed by using PLA. Each green spot represents for a single interaction (MLL & OGT) & DNA was stained with DAPI. \*Significantly different from SNUC5 cells (p<0.05). The cells were transfected with non-targeting siRNA (siControl) or siOGT RNA for 24 h. F. Expression pattern of MLL mRNA in SNUC5/5-FUR cells was determined by RT-PCR analysis. \*Significantly different from siControl-transfected cells (p<0.05). G. Expression pattern of OGT, MLL, HFC1, & Nrf2 in SNUC5/5-FUR cells was determined by Western blot analysis. \*Significantly different from siControl-transfected cells (p<0.05). Image collected & cropped by CiteAb from the following publication (https://www.oncotarget.com/lookup/doi/10.18632/oncotarget.9745), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

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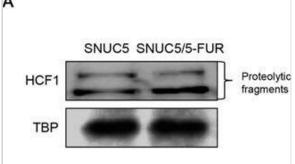


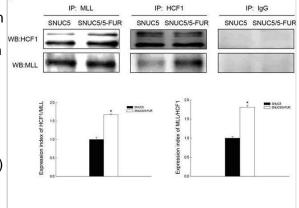
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### **Publications**

Partridge EC, Chhetri SB, Prokop JW et al. Occupancy maps of 208 chromatin-associated proteins in one human cell type Nature 2020-07-30 [PMID: 32728244]

Pugacheva, EM;Bhatt, DN;Rivero-Hinojosa, S;Tajmul, M;Fedida, L;Price, E;Ji, Y;Loukinov, D;Strunnikov, AV;Ren, B;Lobanenkov, VV; BORIS/CTCFL epigenetically reprograms clustered CTCF binding sites into alternative transcriptional start sites Genome biology 2024-01-31 [PMID: 38297316]

Kang KA, Piao MJ, Ryu YS et al. Interaction of DNA demethylase and histone methyltransferase upregulates Nrf2 in 5-fluorouracil-resistant colon cancer cells. Oncotarget. 2016-06-28 [PMID: 27259240] (WB, Human)

Parker JB, Palchaudhuri S, Yin H et al. A transcriptional regulatory role of the THAP11-HCF-1 complex in colon cancer cell function. Mol Cell Biol 2012-05-01 [PMID: 22371484]

Rizki G, Iwata TN, Li J et al. The evolutionarily conserved longevity determinants HCF-1 and SIR-2.1/SIRT1 collaborate to regulate DAF-16/FOXO. PLoS Genet 2011-09-01 [PMID: 21909281]





# Novus Biologicals USA

10730 E. Briarwood Avenue Centennial, CO 80112

USA

Phone: 303.730.1950 Toll Free: 1.888.506.6887

Fax: 303.730.1966

nb-customerservice@bio-techne.com

# **Bio-Techne Canada**

21 Canmotor Ave Toronto, ON M8Z 4E6

Canada

Phone: 905.827.6400 Toll Free: 855.668.8722 Fax: 905.827.6402

canada.inquires@bio-techne.com

## **Bio-Techne Ltd**

19 Barton Lane Abingdon Science Park Abingdon, OX14 3NB, United Kingdom

Phone: (44) (0) 1235 529449 Free Phone: 0800 37 34 15 Fax: (44) (0) 1235 533420 info.EMEA@bio-techne.com

# **General Contact Information**

www.novusbio.com

Technical Support: nb-technical@bio-

techne.com

Orders: nb-customerservice@bio-techne.com

General: novus@novusbio.com

### Products Related to NB100-68209

HAF008 Goat anti-Rabbit IgG Secondary Antibody [HRP]

NB7160 Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]

NBP2-24891 Rabbit IgG Isotype Control 210-TA-005 TNF-alpha [Unconjugated]

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