

Product Datasheet

QuikChIP Kit (ChIP) NBP2-29902

Unit Size: 1 Kit

Storage of components varies. See protocol for specific instructions.

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technical@novusbio.com

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NBP2-29902**QuikChIP Kit (ChIP)**

Product Information	
Unit Size	1 Kit
Concentration	Concentration is not relevant for this product. Please see the protocols for proper use of this product.
Storage	Storage of components varies. See protocol for specific instructions.
Product Description	
Description	<p>The QuikChIP(TM) Kit contains components for 25 ChIP assays optimized for use with transcriptionally active chromatin in adherent or suspension mammalian cells. The protocol is optimized for use with one 10 cm plate containing 5×10^6 cells per preparation. Each ChIP assay requires approximately 1×10^6 cells. Thus, a 10 cm plate (one preparation) of cells will provide DNA sufficient for five ChIP assays.</p> <p>Features: Quick and simple. Optimized ready-to-use buffers and protocol are included. Can be used for both histone and non-histone proteins. Reagents for 25 ChIP assays and sheared DNA preparations.</p>
Species	Human, Mouse, Bacteria
Reactivity Notes	Mouse reactivity reported in scientific literature (PMID: 23709694). Bacteria reactivity reported in scientific literature (PMID: 24363348). Human reactivity reported in scientific literature (PMID: 21086175).
Kit Components	Wash Buffer A (25 mL), Wash Buffer B (25 mL), Wash Buffer C (25 mL), Wash Buffer D (25 mL), 10X Glycine (25 mL), 10X PBS (55 mL), ChIP Dilution Buffer (50 mL), Salmon Sperm DNA/Protein A/G Agarose (2 x 1.75 mL), RNase A at 10 mg/mL (60 uL), Proteinase K at 10 mg/mL (60 uL), 20% SDS (625 uL), 1M NaHCO ₃ (1.25 mL), 0.5M EDTA (250 uL), 5M NaCl (500 uL), 1M Tris-HCl pH 6.5 (500 uL), SDS Lysis Buffer (25 mL), 100X PMSF (2 x 0.75 mL), 100X PIC (2 x 0.75 mL)
Product Application Details	
Applications	Immunoprecipitation, Chromatin Immunoprecipitation (ChIP)
Recommended Dilutions	Immunoprecipitation reported in scientific literature (PMID 21957289), Chromatin Immunoprecipitation (ChIP)



Images

Chromatin Immunoprecipitation: Quick ChIP Kit [NBP2-29902] - Human MCF-7 cells were fixed for 10 minutes with 1% formaldehyde. The cells were lysed and the chromatin sonicated (200-1000 bp fragments). Chromatin was immunoprecipitated using DNMT3b mAb, (Lane 2) and a no antibody control (Lane 3). The PCR amplification was performed with primers specific to the progesterone receptor (PR) promoter region as follows: 94C 5 min, 94C 30 sec, 59C 30 sec 40 cycles, 72C 30 sec, 72C 10 min. Following PCR, 20 ul of each sample was analyzed on a 2% agarose gel and visualized by UV-illumination following ethidium bromide staining. PCR product was observed in the DNMT3b mAb ChIP (Lane 2) and not in the control (Lane 3).

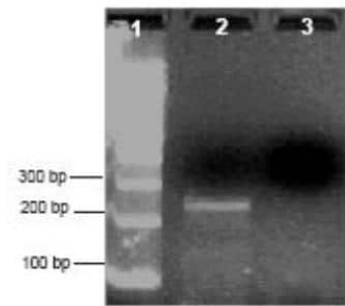


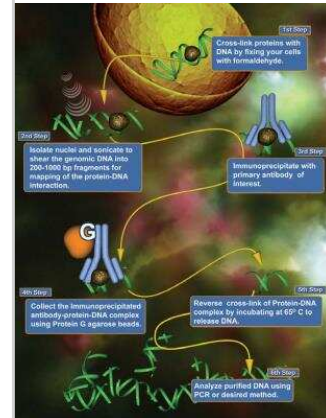
FIGURE 1

Lane 1: 100 bp ladder.

Lane 2: DNMT3b.

Lane 3: No antibody Control.

Quick ChIP Kit [NBP2-29902]



Publications

Pal P, Roy S, Chowdhury A et al. Parkinson's Disease Associated 18 bp Promoter Variant of DJ-1 Alters Rest Binding and Regulates its Expression papers.ssrn.com 2022-04-04 [PMID: 36603736] (Chemotaxis)

Zhou X, Li L, Guo X et al. HBXIP induces anoikis resistance by forming a reciprocal feedback loop with Nrf2 to maintain redox homeostasis and stabilize Prdx1 in breast cancer NPJ breast cancer 2022-01-13 [PMID: 35027562]

Pradeepa , Suresh V, Singh VK Et al. EVI1 promotes metastasis by downregulating TIMP2 in metastatic colon and breast cancer cells The international journal of biochemistry & cell biology 2021-11-18 [PMID: 34800694] (Chemotaxis)

Wang M, Zheng Q, Zhao Z Et al. HES5 Activates Long Noncoding RNA UCA1 to Induce Colorectal Cancer Progression by Modulating miR-185/NOTCH3 Signaling Gastroenterology research and practice 2021-10-25 [PMID: 34733326] (Chemotaxis)

Ma J, Xing B, Cao Y et al. Menin-regulated Pbk controls high fat diet-induced compensatory beta cell proliferation EMBO molecular medicine 2021-04-06 [PMID: 33821572] (Chemotaxis, Mouse)

Upregulation of Steroidogenic Acute Regulatory Protein by Hypoxia Stimulates Aldosterone Synthesis in Pulmonary Artery Endothelial Cells to Promote Pulmonary Vascular Fibrosis. Maron BA, Oldham WM, Chan SY Circulation [PMID: 25001622] (Chemotaxis, Human)

Nayak A, Roy AD, Rout N et al. HIF1 alpha-dependent upregulation of ATAD2 promotes proliferation and migration of stomach cancer cells in response to hypoxia Biochem. Biophys. Res. Commun. 2020-01-17 [PMID: 31959473] (Chemotaxis, Human)

Kumar S, Jung JK, Kim Y et al. Characterization of joining sites of a viral histone H4 on host insect chromosomes PLoS One. 2017-05-08 [PMID: 28486493] (Chemotaxis, Insect)

Details:

ChIP-Seq was performed on *Plutella xylostella*.

Burlibaşa, L;Ionescu, AC;Dragusanu, DM; Histone hyperacetylation and DNA methylation interplay during murine spermatogenesis Zygote 2019-08-15 [PMID: 31412961] (Chemotaxis)

Wu Y, Doeppner M, Hojnacki T et al. Disruption of the menin-MLL interaction triggers menin protein degradation via ubiquitin-proteasome pathway Am J Cancer Res 2019-08-01 [PMID: 31497350] (Chemotaxis, Human)

Smith MP, Rana S, Ferguson J et al. A PAX3/BRN2 rheostat controls the dynamics of BRAF mediated MITF regulation in MITFhigh /AXLlow melanoma Pigment Cell Melanoma Res 2018-10-01 [PMID: 30277012] (Chemotaxis, Human)

Leslie PL, Franklin DA, Liu Y et al. p53 Regulates the Expression of LRP1 and Apoptosis through a Stress Intensity-Dependent MicroRNA Feedback Loop Cell Rep 2018-08-07 [PMID: 30089260] (Chemotaxis, Human)

More publications at <http://www.novusbio.com/NBP2-29902>



Procedures

MSDS (NBP2-29902)

TRITON X-100

Hazard Information

Chemical Name: TRITON X-100

Chemical Formula: $(C_2H_4O)_n C_{14}H_{22}O$ CAS Number: 9002-93-1

EEC-No: n/a

First Aid Measures

Eye Contact: Can causes eye irritation.

Skin Contact: Causes skin irritation and is toxic if absorbed through skin. Inhalation: May be harmful if inhaled. Causes respiratory tract irritation. Ingestion: Harmful if swallowed.

Accidental Release Measures

If inhaled, move person into fresh air. If not breathing give artificial respiration and consult a physician.

In case of skin contact, wash off with soap and plenty of water.

In case of eye contact, rinse thoroughly with plenty of water for at least 15 minutes.

If swallowed do NOT induce vomiting. Rinse mouth with water and consult a physician.

Handling and Storage

Handling: Avoid contact with skin and eyes. Keep container tightly closed and store and handle in a cool, dry, well-ventilated place.

Exposure Controls / Personal Protection Ventilation: Handle in a well-ventilated area Gloves:

Handle with rubber or latex gloves

Eye Protection: Safety glasses, goggles or face shield to protect from splash hazard

Physical and Chemical Properties

Form: Liquid

Color: Colorless

Odor: Odorless

Melting Point: 6 degrees C (42.8 degrees F)

Boiling Temperature: 270 degrees C (518 degrees F) Density: No data available

Vapor Pressure: No data available Solubility in Water: Very soluble Flash Point: No data available

Explosion limits: No data available

Ignition Temperature: No data available

Stability and Reactivity

Stable under recommended storage conditions.

Disposal/Spill Considerations

Small Spill: Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill: Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Sodium Dodecyl Sulphate

Hazard Information

Chemical Name: Sodium Dodecyl Sulphate Chemical Formula: $NaC_{12}H_{25}O_4S$

CAS Number: 151-21-3

EEC-No: 205-788-1

First Aid Measures



Eye Contact: Can causes eye irritation.

Skin Contact: Causes skin irritation and is toxic if absorbed through skin. Inhalation: May be harmful if inhaled. Causes respiratory tract irritation. Ingestion: Harmful if swallowed.

Accidental Release Measures

If inhaled, move person into fresh air. If not breathing give artificial respiration and consult a physician.

In case of skin contact, wash off with soap and plenty of water.

In case of eye contact, rinse thoroughly with plenty of water for at least 15 minutes.

If swallowed do NOT induce vomiting. Rinse mouth with water and consult a physician.

Handling and Storage

Handling: Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Handle powder in a fume hood. Keep container tightly closed in a cool, dry, well-ventilated place.

Exposure Controls / Personal Protection Ventilation: Handle powder in a fume hood Gloves: Handle with rubber or latex gloves

Eye Protection: Safety glasses, goggles or face shield

Physical and Chemical Properties

Form: Solid Color: White Odor: Odorless

Melting Point: No data available Boiling Temperature: No data available Density: No data available

Vapor Pressure: No data available Solubility in Water: Very soluble Flash Point: No data available

Explosion limits: No data available

Ignition Temperature: No data available

Stability and Reactivity

Stable under recommended storage conditions.

Disposal Considerations

Contain spill collect with a vacuum cleaner or by wet-brushing and place in a container for disposal according to local regulations. Keep in suitable, closed containers for disposal.

EDTA

Hazard Information

Chemical Name: Ethylenediaminetetraacetic Acid Tetrasodium Salt, Dihydrate Chemical Formula:

C₁₀H₁₂N₂Na₄O₈·2H₂O

CAS Number: 10378-23-1

First Aid Measures

Eye Contact: Can cause slight eye irritation. Skin Contact: Can cause slight skin irritation.

Inhalation: Can cause slight respiratory tract irritation.

Ingestion: Harmful if swallowed.

Accidental Release Measures

If inhaled, move person into fresh air. If not breathing give artificial respiration and consult a physician.

In case of skin contact, wash off with soap and plenty of water.

In case of eye contact, rinse thoroughly with plenty of water for at least 15 minutes.

If swallowed do NOT induce vomiting. Rinse mouth with water and consult a physician.

Handling and Storage

Handling: Avoid contact with skin and eyes. Keep container tightly closed in a cool, dry, well-ventilated place.

Exposure Controls / Personal Protection Ventilation: Handle in a well-ventilated area Gloves:

Handle with rubber or latex gloves
 Eye Protection: Safety glasses, goggles or face shield

Physical and Chemical Properties

Form: Solid Color: White

Odor: No data available

Melting Point: No data available Boiling Temperature: No data available Density: No data available

Vapor Pressure: No data available Solubility in Water: soluble

Flash Point: > 93.3 degrees C (200 degrees F) Explosion limits: No data available Ignition Temperature: No data available

Stability and Reactivity

Stable under recommended storage conditions.

Disposal Considerations

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill: Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Glycine (Glycerine)

Hazard Information

Chemical Name: Glycine (Glycerine) Chemical Formula: C₂H₅NO₂

CAS Number: 56-40-6

First Aid Measures

Eye Contact: Can cause slight eye irritation. Skin Contact: Can cause slight skin irritation.

Inhalation: Can cause slight respiratory tract irritation. Ingestion: Harmful if swallowed.

Accidental Release Measures

If inhaled, move person into fresh air. If not breathing give artificial respiration and consult a physician.

In case of skin contact, wash off with soap and plenty of water.

In case of eye contact, rinse thoroughly with plenty of water for at least 15 minutes.

If swallowed do NOT induce vomiting. Rinse mouth with water and consult a physician.

Handling and Storage

Handling: Avoid contact with skin and eyes. Keep container tightly closed in a cool, dry, well-ventilated place.

Exposure Controls / Personal Protection Ventilation: Handle in a well-ventilated area Gloves:

Handle with rubber or latex gloves

Eye Protection: Safety glasses, goggles or face shield to prevent splash hazard

Physical and Chemical Properties

Form: Liquid Color: Colorless Odor: Odorless

Melting Point: Decomposition temperature: Starts to decompose at 233 degrees C (451.4 degrees F); Completely sintered at 280 deg. C.

Boiling Temperature: No data available Density: No data available

Vapor Pressure: No data available Solubility in Water: soluble

Flash Point: >176.67 degrees C (350 degrees F)

Explosion limits: No data available Ignition Temperature: No data available

Stability and Reactivity

Stable under recommended storage conditions.

Disposal Considerations

Small Spill: Use appropriate tools to put the spill in a convenient waste disposal container.

Finish cleaning by spreading water on the contaminated surface and dispose of according to local



and regional authority requirements.

Large Spill: Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

PMSF

Hazard Information

Chemical Name: Phenylmethylsulfonyl fluoride **Chemical Formula:** C₇H₇FO₂S

CAS Number: 329-98-6

First Aid Measures

Eye Contact: Can cause slight eye irritation. **Skin Contact:** Can cause slight skin irritation.

Inhalation: Can cause slight respiratory tract irritation. **Ingestion:** Harmful if swallowed.

Accidental Release Measures

If inhaled, move person into fresh air. If not breathing give artificial respiration and consult a physician.

In case of skin contact, wash off with soap and plenty of water.

In case of eye contact, rinse thoroughly with plenty of water for at least 15 minutes.

If swallowed do NOT induce vomiting. Rinse mouth with water and consult a physician.

Handling and Storage

Handling: Avoid contact with skin and eyes. Keep container tightly closed in a cool, dry, well-ventilated place.

Exposure Controls / Personal Protection Ventilation: Handle in a well-ventilated area **Gloves:**

Handle with rubber or latex gloves

Eye Protection: Safety glasses, goggles or face shield

Physical and Chemical Properties

Form: Solid

Color: No data available **Odor:** No data available **Melting Point:** 92 degrees C (197.6 degrees F)

Boiling Temperature: No data available **Density:** No data available

Vapor Pressure: No data available **Solubility in Water:** soluble

Flash Point: No data available **Explosion limits:** No data available **Ignition Temperature:** No data available

Stability and Reactivity

Stable under recommended storage conditions.

Disposal Considerations

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large Spill: Corrosive solid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal.

Protease Inhibitor Cocktail

Hazard Information

Chemical Name: 4-(2-Aminoethyl) benzenesulfonylfluoride hydrochloride **Chemical Formula:** C₈H₁₀FNO₂S HCl

CAS Number: 30827-99-7

First Aid Measures

Eye Contact: Can cause slight eye irritation. **Skin Contact:** Can cause slight skin irritation.

Inhalation: Can cause slight respiratory tract irritation. **Ingestion:** Harmful if swallowed.



Accidental Release Measures

If inhaled, move person into fresh air. If not breathing give artificial respiration and consult a physician.

In case of skin contact, wash off with soap and plenty of water.

In case of eye contact, rinse thoroughly with plenty of water for at least 15 minutes.

If swallowed do NOT induce vomiting. Rinse mouth with water and consult a physician.

Handling and Storage

Handling: Avoid contact with skin and eyes. Keep container tightly closed in a cool, dry, well-ventilated place.

Exposure Controls / Personal Protection Ventilation: Handle in a well-ventilated area Gloves:

Handle with rubber or latex gloves

Eye Protection: Safety glasses, goggles or face shield

Physical and Chemical Properties

Form: Solid Color: beige

Odor: No data available Melting Point: 183 degrees C (361 degrees F)

Boiling Temperature: No data available Density: No data available

Vapor Pressure: No data available Solubility in Water: soluble

Flash Point: No data available Explosion limits: No data available Ignition Temperature: No data available

Stability and Reactivity

Stable under recommended storage conditions.

Disposal Considerations

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large Spill: Corrosive solid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal.

Salmon sperm DNA**Hazard Information**

Chemical Name: Salmon sperm DNA Chemical Formula: n/a

CAS Number: 100403-24-5

EEC-No: 309-566-6

First Aid Measures

Eye Contact: May cause eye irritation. Skin Contact: May cause skin irritation. Inhalation: May be harmful if inhaled. Ingestion: May be harmful if swallowed.

Accidental Release Measures

If inhaled, move person into fresh air. If not breathing give artificial respiration and consult a physician.

In case of skin contact, wash off with soap and plenty of water.

In case of eye contact, rinse thoroughly with plenty of water for at least 15 minutes.

If swallowed do NOT induce vomiting. Rinse mouth with water and consult a physician.

Handling and Storage

Handling: Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Handle powder in a well-ventilated area. Keep container tightly closed in a cool, dry, well-ventilated place.

Exposure Controls / Personal Protection Ventilation: Handle powder in a well-ventilated area

Gloves: Handle with rubber or latex gloves

Eye Protection: Safety glasses, goggles or face shield

Physical and Chemical Properties

Form: Solid Color: White

Odor: No data available

Melting Point: No data available Boiling Temperature: No data available Density: No data available

Vapor Pressure: No data available Solubility in Water: soluble

Flash Point: No data available Explosion limits: No data available Ignition Temperature: No data available

Stability and Reactivity

Stable under recommended storage conditions.

Disposal Considerations

Absorb on sand or vermiculite and place in closed containers for disposal. Dispose contaminated material as waste according to all federal, state and local environmental regulations.. Ventilate area and wash spill site after material clean-up is complete.

Proteinase K

Hazard Information

Chemical Name: Proteinase K, from Tritirachium album CAS Number: 39450-01-6

First Aid Measures

Eye Contact: Can cause slight eye irritation. Skin Contact: Can cause slight skin irritation.

Inhalation: Can cause slight respiratory tract irritation.

Ingestion: Harmful if swallowed.

Accidental Release Measures

If inhaled, move person into fresh air. If not breathing give artificial respiration and consult a physician.

In case of skin contact, wash off with soap and plenty of water.

In case of eye contact, rinse thoroughly with plenty of water for at least 15 minutes.

If swallowed do NOT induce vomiting. Rinse mouth with water and consult a physician.

Handling and Storage

Handling: Avoid contact with skin and eyes. Keep container tightly closed in a cool, dry, well-ventilated place.

Exposure Controls / Personal Protection Ventilation: Handle in a well-ventilated area Gloves:

Handle with rubber or latex gloves

Eye Protection: Safety glasses, goggles or face shield to prevent splash hazard

Physical and Chemical Properties

Form: Solid

Color: No data available Odor: No data available

Melting Point: No data available Boiling Temperature: No data available Density: No data available

Vapor Pressure: No data available Solubility in Water: soluble

Flash Point: No data available Explosion limits: No data available Ignition Temperature: No data available

Stability and Reactivity

Stable under recommended storage conditions.

Disposal Considerations

Small Spill: Use appropriate tools to put the spill in a convenient waste disposal container.

Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill: Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.



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

Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Kits are guaranteed for 6 months from date of receipt.

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