

Direct-Blot™ HRP anti-HA.11 Epitope Tag Antibody

Catalog# / Size	901520 / 25 µL 901519 / 100 µL
Clone	16B12
Regulatory Status	RUO
Other Names	HA epitope tag, HA1, HA2, hemagglutinin, Hemagglutinin HA1 chain, Hemagglutinin HA2 chain, YPYDVPDYA, Hemagglutinin tag
Isotype	Mouse IgG1, κ
Description	The HA tag (hemagglutinin) is an amino acid sequence derived from the human influenza hemagglutinin surface glycoprotein, corresponding to amino acids 98-106. It is commonly used as a tag to facilitate detection, isolation, and purification of proteins. The full amino acid sequence is: YPYDVPDYA.

Product Details

Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Monoclonal antibody HA.11 was raised against the twelve amino acid peptide CYPYDVPDYASL.
Formulation	This antibody is provided in 50% glycerol in aqueous buffered solutions with preservatives.
Preparation	The antibody was purified by affinity chromatography and conjugated with HRP under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	Upon receipt, the antibody solution should be stored undiluted at -20°C, and protected from prolonged exposure to light.
Application	WB - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by Western blotting . For Western blotting, the suggested dilution is 1:1000-1:10000. The optimal dilution should be determined by titration for each individual assay of interest. 25 µl and 100 µl of Direct-Blot™ HRP antibody can be used for approximately 5 and 20 Western blots, respectively, at the recommended concentration/dilution.
Application Notes	Additional tested and reported applications of the 16B12 clone for the relevant formats include: western blot (WB), immunocytochemistry (ICC), immunoprecipitation (IP), and flow cytometry (FC). *Our Posi-Tag Control Protein (931301) can be used as a helpful positive control for this antibody. This second-generation HA antibody is an excellent substitute for the 12CA5 monoclonal antibody. The HA.11 antibody recognizes the influenza hemagglutinin epitope (YPYDVPDYA) which has been used extensively as a general epitope tag in expression vectors. The extreme specificity of the antibody allows unambiguous identification and quantitative analysis of the tagged protein. The HA.11 antibody recognizes HA epitopes located in the middle of protein sequences as well as at the N- or C-terminus.
Application References	<ol style="list-style-type: none"> Kim JY, <i>et al.</i> 2003. <i>J Neurosci.</i> 23:5561. (IP, WB) Helliwell SB, <i>et al.</i> 2001. <i>J Cell Biol.</i> 153:649. (WB) Bennett BD, <i>et al.</i> 2000. <i>J Biol Chem.</i> 275:37712. (IF, IP, WB) Royer Y, <i>et al.</i> 2005. <i>J. Biol. Chem.</i> 29:27251. (FC) Smith BA, <i>et al.</i> 2012. <i>Genes Cancer.</i> 3:550. (IHC) PubMed Hogarth C, <i>et al.</i> 2015. <i>Biol Reprod.</i> 93:19. PubMed Görtz D, <i>et al.</i> 2015. <i>Sci Rep.</i> 5:14685. PubMed Wilson C, <i>et al.</i> 2015. <i>PLoS One.</i> 10:0139579. PubMed

9. Smith B, et al. 2012. *Genes Cancer*. 3:550-563. [PubMed](#)
10. Liu Z, et al. 2016. *Nature*. 530:98-102. [PubMed](#)
11. Thoms M, et al. 2016. *Nucleic Acids Res*. 44:926-39. [PubMed](#)
12. Kim Y, et al. 2016. *Nat Commun*. 7:10347. [PubMed](#)
13. Rodríguez-Escudero M, et al. 2016. *PLoS One*. 11:0148032. [PubMed](#)
14. Lehmann W, et al. 2016. *Nat Commun*. 7:10498. [PubMed](#)
15. Testoni E, et al. 2016. *EMBO Mol Med*. 8: 105-16. [PubMed](#)
16. Padilla S, et al. 2016. *Nat Neurosci*. 10.1038/nn.4274. [PubMed](#)
17. Martins J, et al. 2016. *J Cell Sci*. 129:1271-82. [PubMed](#)
18. Matak P, et al. 2016. *Proc Natl Acad Sci U S A*. 113:3428-35. [PubMed](#)
19. Starokadomskyy P, et al. 2016. *Nat Immunol*. 17:495-504. [PubMed](#)
20. Mitxelena J, et al. 2016. *Nucleic Acids Res*. 44:5557-70. [PubMed](#)
21. Thongthip S, et al. 2016. *Genes Dev*. 30:645-59. [PubMed](#)
22. Aaes T, et al. 2016. *Cell Rep*. 15:274-87. [PubMed](#)
23. Hodge C, et al. 2016. *J Biol Chem*. 291:9396-9410. [PubMed](#)
24. Alagramam K, et al. 2016. *Nat Chem Biol*. 12:444-51. [PubMed](#)
25. Veit G, et al. 2016. *PLoS Biol*. 14:1002462. [PubMed](#)
26. Lee B, et al. 2016. *Development*. 143:1721-31. [PubMed](#)
27. Douchi D, et al. 2016. *Plant Cell*. 28:1182-99. [PubMed](#)
28. Avgousti D, et al. 2016. *Nature*. 535:173-77. [PubMed](#)
29. Shin H, et al. 2015. *Nature*. 534:553-7. [PubMed](#)
30. Gross G, et al. 2016. *Nat Methods*. 10.1038/nmeth.3894. [PubMed](#)
31. Dick M, et al. 2016. *Nat Commun*. 7:11929. [PubMed](#)
32. Aldrin-Kirk P, et al. 2016. *Neuron*. 90:955-68. [PubMed](#)
33. Fan R, et al. 2016. *Nat Med*. 22:780-91. [PubMed](#)
34. Rowald K, et al. 2016. *Cell Rep*. 15:2679-91. [PubMed](#)
35. Rampal R, Awasthi A, Ahuja V 2016. *Development*. 143:2334-43. [PubMed](#)
36. Faden F, et al. 2016. *Nat Commun*. 7:12202. [PubMed](#)
37. Lawson C, et al. 2016. *Cancer Res*. 76: 3826-37. [PubMed](#)
38. Szargel R, et al. 2016. *Hum Mol Genet*. 10.1093/hmg/ddw189.. [PubMed](#)
39. Damez-Werno D, et al. 2016. *Proc Natl Acad Sci U S A*. 113: 9623-28. [PubMed](#)
40. Su P, et al. 2016. *J Immunol*. 197: 1054-64. [PubMed](#)
41. Morozumi Y, et al. 2016. *J Mol Cell Biol*. 8:349-62. [PubMed](#)
42. Miura Y, et al. 2016. *Biochem J*. 473:2591-602. [PubMed](#)
43. Pashkova N, et al. 2016. *Cell Rep*. 17:303-15. [PubMed](#)
44. Sanchez M, et al. 2016. *J Biol Chem*. 291:19760-73. [PubMed](#)
45. Hwang J, Lee J, Pallas D 2016. *J Biol Chem*. 291:21008-19. [PubMed](#)
46. Jiménez-Canino R, et al. 2016. *J Biol Chem*. 291:19068-78. [PubMed](#)
47. Barquilla A, et al. 2016. *Mol Biol Cell*. 27:2757-70. [PubMed](#)
48. Yadav S, et al. 2016. *Sci Rep*. 6:34100. [PubMed](#)
49. Hashimoto A, et al. 2016. *Oncogenesis*. 0.388194444. [PubMed](#)
50. Guirouilh-Barbat J, et al. 2016. *PLoS Genet*. 12:e1006230. [PubMed](#)
51. Gómez-H L, et al. 2016. *Nat Commun*. 7:13298. [PubMed](#)
52. Rademacher N, et al. 2016. *Sci Rep*. 6:35283. [PubMed](#)
53. Lin Z, et al. 2016. *Nat Genet*. 10.1038/ng.3701. [PubMed](#)
54. Kaczmarek Z, et al. 2016. *Nat Chem Biol*. 10.1038/nchembio.2217. [PubMed](#)
55. Zee B, et al. 2016. *PLoS One*. 11:e0163820. [PubMed](#)
56. Despras E, et al. 2016. *Nat Commun*. 7:13326. [PubMed](#)
57. Zhang H, et al. 2016. *J Neurosci*. 36:11837-50. [PubMed](#)
58. Zhang M, et al. 2016. *Cell Res*. 26:1302-19. [PubMed](#)
59. Baehr C, et al. 2016. *J Biol Chem*. 291:26875-85. [PubMed](#)
60. Boehm E, et al. 2016. *J Biol Chem*. 291:25877-87. [PubMed](#)
61. Gail Kilroy, et al. 2016. *J Biol Chem*. 291:27289-97. [PubMed](#)
62. Hongchen Cai, Aimin Liu 2016. *Proc Natl Acad Sci U S A*. 113:14751-6. [PubMed](#)
63. Tam K, et al. 2016. *MBio*. 7:e02024-16. [PubMed](#)
64. Hanke L, et al. 2016. *MBio*. 7(6). pii: e01569-16. [PubMed](#)
65. Stoeber M, et al. 2016. *Proc Natl Acad Sci U S A*. 113(50):E8069-E8078. [PubMed](#)
66. Gu Q, et al. 2016. *J Virol*. 90:10545-57. [PubMed](#)
67. Ramachandran S, et al. 2016. *J Biol Chem*. 291: 25489-504. [PubMed](#)
68. Kaufmann T, et al. 2016. *J Cell Sci*. 129:4607-21. [PubMed](#)
69. Piwko W, et al. 2016. *EMBO J*. 35:2584-601. [PubMed](#)
70. Matsuo Y, et al. 2016. *J Cell Sci*. 129:4592-606. [PubMed](#)
71. Athmer J, et al. 2017. *MBio*. 10.1128/mBio.02320-16. [PubMed](#)
72. Gao L, et al. 2017. *J Cell Sci*. 130:396-405. [PubMed](#)
73. Gong Y, et al. 2017. *Genes Dev*. 31:46-58. [PubMed](#)
74. K Kataoka, K Mochizuki 2017. *J Cell Sci*. 130:480-9. [PubMed](#)
75. Liszczak G, et al. 2017. *Proc Natl Acad Sci U S A*. 114:681-6. [PubMed](#)
76. Haggie P, et al. 2017. *J Biol Chem*. 292:771-85. [PubMed](#)
77. T Taetzsch, et al. 2017. *J Neurosci*. 37:70-82. [PubMed](#)
78. Yagita Y, et al. 2017. *J Biol Chem*. 292:691-705. [PubMed](#)
79. Chong Jiang, et al. 2017. *J Biol Chem*. 292:3137-45. [PubMed](#)
80. Maeda R, et al. 2017. *J Biol Chem*. 292:3201-12. [PubMed](#)
81. Davis RB, et al. 2017. *JCI Insight*. 2:e92465. [PubMed](#)
82. Daniel JA, et al. 2017. *Elife*. 6:e26338. [PubMed](#)
83. Oishi A, et al. 2017. *Sci Rep*. 7:8990. [PubMed](#)

Product Citations

1. Sondo E et al. 2018. *Cell chemical biology*. 25(7):891-905 . [PubMed](#)
2. Portales-Castillo I, et al. 2022. *JBMR Plus*. 6:e10604. [PubMed](#)

3. Liu Z, *et al.* 2021. PLoS Pathog. 17:e1010123. [PubMed](#)

RRID AB_2749912 (BioLegend Cat. No. 901520)
AB_2686981 (BioLegend Cat. No. 901519)

Antigen Details

Biology Area Cell Biology
Gene ID NA

Related Protocols

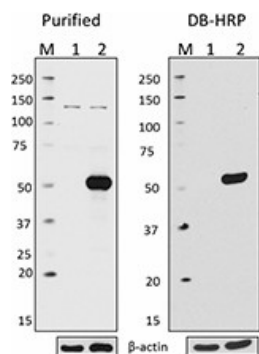
[Direct-Blot™ HRP Antibodies Save You Time - Video](#)

[Western Blotting Protocol](#)

Other Formats

Anti-HA.11 Epitope Tag Affinity Matrix, Alexa Fluor® 488 anti-HA.11 Epitope Tag, Alexa Fluor® 594 anti-HA.11 Epitope Tag, Anti-HA.11 Epitope Tag, Biotin anti-HA.11 Epitope Tag, FITC anti-HA.11 Epitope Tag, Purified anti-HA.11 Epitope Tag, Alexa Fluor® 647 anti-HA.11 Epitope Tag, PE anti-HA.11 Epitope Tag, Direct-Blot™ HRP anti-HA.11 Epitope Tag, Ultra-LEAF™ Purified anti-HA.11 Epitope Tag, Brilliant Violet 421™ anti-HA.11 Epitope Tag, PE/Dazzle™ 594 anti-HA.11 Epitope Tag, PE/Cyanine7 anti-HA.11 Epitope Tag, Pacific Blue™ anti-HA.11 Epitope Tag, APC anti-HA.11 Epitope Tag, PerCP/Cyanine5.5 anti-HA.11 Epitope Tag, TotalSeq™-C1131 anti-HA.11 Epitope Tag, TotalSeq™-A1131 anti-HA.11 Epitope Tag, TotalSeq™-B1131 anti-HA.11 Epitope Tag

Product Data



Total cell lysate from CHO (lane 1) and CHO stably transfected with HA tag fused protein (lane 2) (15 µg/lane) were resolved by electrophoresis (4-12% Bis-Tris gel), transferred to nitrocellulose, and probed with 1:10,000 purified anti-HA.11 or 1:10,000 Direct-Blot™ HRP anti-HA.11 Antibody. For the purified anti-HA.11 antibody, proteins were visualized using a goat anti-mouse-IgG secondary antibody conjugated to HRP. Direct-Blot™ HRP anti-β-actin Antibody was used as a loading controls (lower). Lane M is the MW ladder.

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biolegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587