

APC anti-HA.11 Epitope Tag Antibody

Catalog# / Size	901523 / 25 µg 901524 / 100 µg
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	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography and conjugated with APC under optimal conditions.
Concentration	0.2 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested ICFC - Verified
Recommended Usage	Each lot of this antibody is quality control tested by intracellular flow cytometry using our True-Phos™ Perm Buffer in Cell Suspensions Protocol. For flow cytometric staining, the suggested use of this reagent is ≤0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Red Laser (633 nm)
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
(PubMed link indicates BioLegend citation)	

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. Veit G, et al. 2020. *JCI Insight*. 5:00. [PubMed](#)
2. Rappazzo CG, et al. 2020. *bioRxiv*. . [PubMed](#)

3. Veit G, *et al.* 2021. J Pers Med. 11: [PubMed](#)
4. Omarjee O, *et al.* 2021. J Exp Med. 218: [PubMed](#)
5. Huang RS, *et al.* 2021. Curr Protoc. 1:e246. [PubMed](#)
6. Liu H, *et al.* 2022. Commun Biol. 5:766. [PubMed](#)
7. Fels JM, *et al.* 2021. Cell. 184(13):3486-3501.e21. [PubMed](#)
8. Fujiwara K, *et al.* 2020. Cancers (Basel). 12: [PubMed](#)
9. Sakharkar M, *et al.* 2021. Sci Immunol. :6. [PubMed](#)
10. Salgado-Polo F, *et al.* 2020. J Cell Sci. 133:jcs235044. [PubMed](#)

RRID AB_2734657 (BioLegend Cat. No. 901523)
 AB_2734658 (BioLegend Cat. No. 901524)

Antigen Details

Biology Area Cell Biology
Gene ID NA

Related Protocols

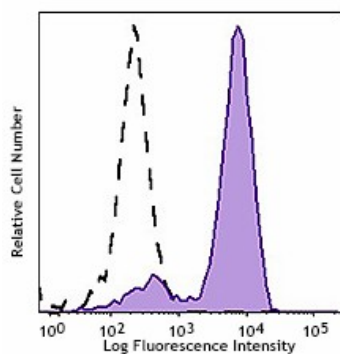
[Intracellular Staining With True-Phos™ Perm Buffer in Cell Suspensions Protocol](#)

[Intracellular Staining With True-Phos™ Perm Buffer in Whole Blood](#)

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



CHO-K1 cells (open histogram) or HA tag stably transfected cells (filled histogram) were fixed with Fixation Buffer (Cat. No. 420801), permeabilized with True-Phos™ Perm Buffer (Cat. No. 425401), then intracellularly stained with HA.11 Epitope Tag (16B12) APC.

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

