

## Alexa Fluor<sup>®</sup> 647 Streptavidin

<b>Catalog# / Size</b>	405237 / 100 µg
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Streptavidin-Alexa Fluor <sup>®</sup> 647, Streptavidin-AF647
<b>Description</b>	Streptavidin binds to biotin with high affinity. Streptavidin-Alexa Fluor <sup>®</sup> 647 is useful for detecting biotinylated antibodies. The excitation of Alexa Fluor <sup>®</sup> 647 by 633 nm / 635 nm laser light induces a light emission maximum of 668 nm.

### Product Details

---

<b>Verified Reactivity</b>	Human, Mouse, Rat, All Species
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	Streptavidin was conjugated with Alexa Fluor <sup>®</sup> 647 under optimal conditions.
<b>Concentration</b>	0.5 mg/ml (concentration relates to the Streptavidin only component of the conjugate)
<b>Storage &amp; Handling</b>	The streptavidin-Alexa Fluor <sup>®</sup> 647 solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a> <a href="#">ICFC - Verified</a>
<b>Recommended Usage</b>	<p>This streptavidin product is quality control tested by immunofluorescent staining with flow cytometric analysis. The concentration provided is based upon molecular mass of streptavidin independent of any additional molecular mass that might be added by the Alexa Fluor<sup>®</sup> 647 conjugation. For flow cytometric staining, the suggested use of this reagent is ≤0.125 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>* Alexa Fluor<sup>®</sup> 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm.</p> <p>Alexa Fluor<sup>®</sup> and Pacific Blue™ are trademarks of Life Technologies Corporation.</p> <p><a href="#">View full statement regarding label licenses</a></p>
<b>Excitation Laser</b>	Red Laser (633 nm)
<b>Application Notes</b>	Streptavidin-Alexa Fluor <sup>®</sup> 647 is useful as a second step reagent for indirect immunofluorescent staining, when used in conjunction with biotinylated primary antibodies. The average molecular weight of Streptavidin-Alexa Fluor <sup>®</sup> 647 is 60 kD and Streptavidin alone is 52 kD.
<b>Application References</b> (PubMed link indicates BioLegend citation)	<ol style="list-style-type: none"><li>Chappaz S, <i>et al.</i> 2007. <i>Blood</i> doi:10.1182/blood-2007-02-074245.</li><li>Nishimoto KP, <i>et al.</i> 2008. <i>J. Immunol.</i> 181:4010. <a href="#">PubMed</a></li><li>Niki T, <i>et al.</i> 2009. <i>J. Biol. Chem.</i> 284:32344. <a href="#">PubMed</a></li><li>Shibui A, <i>et al.</i> 2011. <i>Exp Parasitol.</i> 129:318. <a href="#">PubMed</a></li><li>Scatizzi JC, <i>et al.</i> 2012. <i>J. Immunol.</i> 188:3307. <a href="#">PubMed</a></li><li>Yamakawa N, <i>et al.</i> 2012. <i>Int Immunol.</i> <a href="#">PubMed</a></li><li>Shibata T, <i>et al.</i> 2012. <i>Int Immunol.</i> 24:613. <a href="#">PubMed</a></li><li>Baccala R, <i>et al.</i> 2012. <i>J. Immunol.</i> 189:5976. <a href="#">PubMed</a></li><li>Grevers LC, <i>et al.</i> 2013. <i>Ann Rheum Dis.</i> 72:278. <a href="#">PubMed</a></li><li>Woo SJ, <i>et al.</i> 2013. <i>J Leukoc Biol.</i> 93:363. <a href="#">PubMed</a></li><li>Ashbaugh JJ, <i>et al.</i> 2013. <i>J. Immunol.</i> 190:4525. <a href="#">PubMed</a></li><li>Reading JL, 2013. <i>J. immunol.</i> 190:4542. <a href="#">PubMed</a>.</li><li>Kanno A, <i>et al.</i> 2013. <i>Int Immunol.</i> 25:413. <a href="#">PubMed</a></li><li>Gunaydin G, <i>et al.</i> 2014. <i>Vaccine.</i> 32:470. <a href="#">PubMed</a></li><li>Shade KT, <i>et al.</i> 2015. <i>J Exp Med.</i> 212:457. <a href="#">PubMed</a></li></ol>
<b>Product Citations</b>	<ol style="list-style-type: none"><li>Janeczek A, <i>et al.</i> 2017. <i>Nanomedicine.</i> 10.2217/nnm-2016-0386. <a href="#">PubMed</a></li><li>Shibata K, <i>et al.</i> 2022. <i>Nat Commun.</i> 13:6948. <a href="#">PubMed</a></li><li>Pobezinskaya EL <i>et al.</i> 2019. <i>Front Immunol.</i> 1.079861111. <a href="#">PubMed</a></li></ol>

4. Agudelo M, *et al.* 2021. J Exp Med. :218. [PubMed](#)
5. Gaebler C, *et al.* 2021. Nature. 639:591. [PubMed](#)
6. Schiesser JV, *et al.* 2021. Sci Rep. 11:8315. [PubMed](#)
7. Agudelo M, *et al.* 2022. J Exp Med. 219:. [PubMed](#)
8. Noreng S, *et al.* 2022. Nat Commun. 13:6079. [PubMed](#)
9. Biram A, *et al.* 2020. Cell Rep. 30:1910. [PubMed](#)
10. Shade K, *et al.* 2015. J Exp Med. 212:457. [PubMed](#)
11. Needham BD, *et al.* 2022. Nature. 602:647. [PubMed](#)
12. Sokol CL *et al.* 2018. Immunity. 49(3):449-463 . [PubMed](#)
13. Zhou D, *et al.* 2022. Nat Commun. 13:5174. [PubMed](#)
14. Zhang R, *et al.* 2021. MAbs. 13:1904546. [PubMed](#)
15. Wang Z, *et al.* 2021. bioRxiv. . [PubMed](#)
16. Glaros V, *et al.* 2021. Immunity. 54:2005. [PubMed](#)
17. Yap K, *et al.* 2022. STAR Protoc. 3:101139. [PubMed](#)
18. Cho A, *et al.* 2021. Nature. Online ahead of print. [PubMed](#)
19. Charles TP, *et al.* 2021. PLoS Pathog. 17:e1009257. [PubMed](#)
20. Van Den Berge N, *et al.* 2019. Acta Neuropathol. 138(4):535. [PubMed](#)
21. Kacherovsky N, *et al.* 2019. Nat Biomed Eng. 0.66875. [PubMed](#)
22. Alameh MG, *et al.* 2021. Immunity. 54:2877. [PubMed](#)
23. Gilpin TE, *et al.* 2021. J Immunol. 207:1065. [PubMed](#)
24. Van Simaeys D, *et al.* 2022. Nat Commun. 13:1815. [PubMed](#)
25. Biram A, *et al.* 2020. Bio Protoc. e3562:10. [PubMed](#)
26. Lee M, *et al.* 2020. Elife. :9. [PubMed](#)
27. Duong BTV, *et al.* 2020. EBioMedicine. 61:103031. [PubMed](#)
28. Kulkarni N, *et al.* 2017. Eur J Appl Physiol.. 10.1007/s00421-017-3704-z. [PubMed](#)
29. Wang X, *et al.* 2021. EMBO J. 40:e105926. [PubMed](#)
30. Wang Z, *et al.* 2021. Nature. 592:616. [PubMed](#)
31. Puentes-Mestril C, *et al.* 2021. J Neurosci. 41:5386. [PubMed](#)
32. Wang Z, *et al.* 2022. J Exp Med. 219:. [PubMed](#)
33. Wang Z, *et al.* 2020. Elife. 9:00. [PubMed](#)
34. Li D, *et al.* 2020. Immunohorizons. 0.661805556. [PubMed](#)
35. Wang Z, *et al.* 2021. Nature. 595:426. [PubMed](#)
36. Lederer K, *et al.* 2022. Cell. . [PubMed](#)
37. Gaebler C, *et al.* 2020. bioRxiv. . [PubMed](#)
38. Plewes MR, *et al.* 2020. FASEB J. 5299:34. [PubMed](#)
39. Chmielewski M and Abken H 2017. Cell Rep.. 10.1016/j.celrep.2017.11.063. [PubMed](#)
40. Tsai S, *et al.* 2018. Cell Metab. 28:922. [PubMed](#)
41. Frohlich J, *et al.* 2020. Aging (Albany NY). 12:20024. [PubMed](#)
42. Pabbisetty S, *et al.* 2016. Proc Natl Acad Sci U S A. 113: E4662 - E4670. [PubMed](#)
43. Yoshikawa S, *et al.* 2016. Sci Rep. 6:18738. [PubMed](#)
44. Cho A, *et al.* 2022. J Exp Med. 219:. [PubMed](#)

## Antigen Details

Gene ID NA

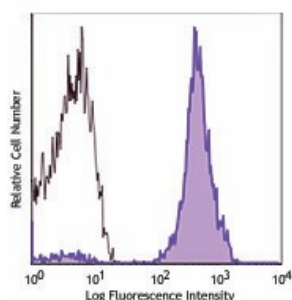
## Related Protocols

[Surface and Intracellular Cytokine Staining for Flow Cytometry - Video](#)

[Cell Surface Flow Cytometry Staining Protocol](#)

[Intracellular Flow Cytometry Staining Protocol](#)

## Product Data



Human peripheral blood lymphocytes were stained with biotinylated CD3 (filled histogram) or biotinylated mouse IgG1 isotype control (open histogram), followed by SAV-Alexa Fluor® 647.

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](http://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](http://www.biolegend.com)  
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587