

Streptavidin Conjugates

Introduction

AAT Bioquest® provides an extensive range of streptavidin products, including those tagged with our superior iFluor™ and mFluor™ dye series. These dyes are specifically engineered for protein labeling, especially antibodies, offering exceptional brightness, photostability, and minimal protein quenching. They are efficiently excited by common fluorescence instrument laser lines (e.g., 350, 405, 488, 555, and 633 nm). Notably, iFluor™ dyes outperform traditional fluorescent labeling dyes like FITC, TRITC, Texas Red®, Cy3®, Cy5®, and Cy7® in terms of labeling efficacy. Each iFluor™ dye is tailored to match the spectral properties of specific Alexa Fluor® or equivalent fluorescent labeling dyes (such as DyLight™ dyes).

Streptavidin conjugates are extensively utilized in conjunction with biotin conjugates for the specific detection of various proteins, protein motifs, nucleic acids, and other molecules, owing to streptavidin's high binding affinity for biotin. For most fluorescent streptavidin applications, a concentration range of 1 - 20 µg/mL is typically sufficient, although optimal conditions should be determined for each specific application. AAT Bioquest offers a comprehensive selection of iFluor™ dye-labeled products, including secondary antibodies, antibody labeling kits, and other bioconjugates like phalloidins and annexin V. For more information, please visit www.aatbio.com.

Storage and Handling

Upon receiving, store the liquid products (RPE, APC, and PerCP conjugates) at 4°C, away from light, and avoid freezing. Store the lyophilized powder at temperatures <-15°C, also protected from light and moisture. When preparing for use, reconstitute the powder with ddH₂O containing 0.1% bovine serum albumin to obtain a 1mg/mL stock solution. This reconstituted solution remains stable for up to two months without significant changes when stored at 4°C, away from light, and in the presence of 2 mM sodium azide.

For extended storage, the reconstituted solution can either be aliquoted into single-use portions or mixed with an equal volume of glycerol to achieve a final concentration of 50%, without aliquoting, and then stored at -20°C, protected from light. The product remains stable for 1 year at -20°C. For all RPE, APC, and PerCP conjugates, store them at 2-6°C and do not freeze.

Selection Chart for Streptavidin Conjugates

Cat. #	Product Name	Unit	Ex (nm)	Em (nm)
16890	XFD350-streptavidin conjugate *XFD350 Same Structure to Alexa Fluor™ 350*	1 mg	343	441
16891	XFD488-streptavidin conjugate *XFD488 Same Structure to Alexa Fluor™ 488*	1 mg	499	520
16892	XFD594-streptavidin conjugate *XFD594 Same Structure to Alexa Fluor™ 594*	1 mg	590	618
16900	RPE-streptavidin conjugate	100 ug	565	574
16901	RPE-streptavidin conjugate	1 mg	565	574
16902	APC-streptavidin conjugate	100 ug	651	660
16905	PerCP-streptavidin conjugate	100 ug	477	678
16906	RPE-iFluor® 647-streptavidin conjugate	100 ug	565	666
16907	RPE-iFluor® 750-streptavidin conjugate	100 ug	565	778
16908	APC-iFluor® 750-streptavidin conjugate	100 ug	651	778
16910	FITC-streptavidin conjugate	1 mg	491	516
16911	Texas Red®-streptavidin conjugate	1 mg	586	603
16912	Cy3®-streptavidin conjugate	1 mg	555	569

Cat. #	Product Name	Unit	Ex (nm)	Em (nm)
16913	Cy5®-streptavidin conjugate	1 mg	651	670
16914	Cy7®-streptavidin conjugate	1 mg	756	779
16916	RPE-Cy7-streptavidin conjugate	100 ug	565	779
16917	RPE-Cy7-streptavidin conjugate	1 mg	565	779
16918	RPE-Cy5-streptavidin conjugate	100 ug	565	670
16919	RPE-Cy5-streptavidin conjugate	1 mg	565	670
16920	HRP-streptavidin conjugate	1 mg	N/A	N/A
16921	AP-streptavidin conjugate [Streptavidin-alkaline phosphatase conjugate]	1 mg	N/A	N/A
16925	trFluor™ Eu-streptavidin conjugate	100 ug	346	617
16930	mFluor™ Violet 450-streptavidin conjugate	100 ug	406	445
16931	mFluor™ Violet 510-streptavidin conjugate	100 ug	412	505
16932	mFluor™ Violet 540-streptavidin conjugate	100 ug	402	535
16935	mFluor™ Blue 570-streptavidin conjugate	100 ug	505	564
16938	mFluor™ Green 620-streptavidin conjugate	100 ug	525	623
16942	mFluor™ Yellow 630-streptavidin conjugate	100 ug	570	632
16946	mFluor™ Red 700-streptavidin conjugate	100 ug	680	695
16948	mFluor™ Red 780-streptavidin conjugate	100 ug	629	767
16950	iFluor® 350-streptavidin conjugate	200 ug	345	450
16952	iFluor® 405-streptavidin conjugate	200 ug	403	427
16955	iFluor® 488-streptavidin conjugate	200 ug	491	516
16956	iFluor® 514-streptavidin conjugate	200 ug	511	527
16957	iFluor® 532-streptavidin conjugate	200 ug	537	560
16958	iFluor® 546-streptavidin conjugate	200 ug	541	557
16959	iFluor® 555-streptavidin conjugate	200 ug	557	570
16960	iFluor® 568-streptavidin conjugate	200 ug	568	587
16962	iFluor® 594-streptavidin conjugate	200 ug	587	594
16965	iFluor® 633-streptavidin conjugate	200 ug	640	654
16966	iFluor® 647-streptavidin conjugate	200 ug	656	670
16968	iFluor® 680-streptavidin conjugate	200 ug	684	701
16970	iFluor® 700-streptavidin conjugate	200 ug	690	713
16973	iFluor® 750-streptavidin conjugate	200 ug	757	779
16975	iFluor® 790-streptavidin conjugate	200 ug	787	812
16976	iFluor® 800-streptavidin conjugate	200 ug	801	820
16977	iFluor® 820-streptavidin conjugate	200 ug	822	850
16978	iFluor® 840-streptavidin conjugate	200 ug	836	879
16979	iFluor® 860-streptavidin conjugate	200 ug	853	878
16980	iFluor® 350-streptavidin conjugate	1 mg	345	450
16982	iFluor® 405-streptavidin conjugate	1 mg	403	427

Cat. #	Product Name	Unit	Ex (nm)	Em (nm)
16985	iFluor® 488-streptavidin conjugate	1 mg	491	516
16986	iFluor® 514-streptavidin conjugate	1 mg	511	527
16987	iFluor® 532-streptavidin conjugate	1 mg	537	560
16989	iFluor® 555-streptavidin conjugate	1 mg	557	570
16992	iFluor® 594-streptavidin conjugate	1 mg	587	594
16995	iFluor® 633-streptavidin conjugate	1 mg	640	654
16996	iFluor® 647-streptavidin conjugate	1 mg	656	670
16997	iFluor® 680-streptavidin conjugate	1 mg	684	701
16998	iFluor® 700-streptavidin conjugate	1 mg	690	713
16999	iFluor® 750-streptavidin conjugate	1 mg	757	779
47200	mFluor™ UV455-streptavidin conjugate	100 ug	357	461
47201	mFluor™ UV455-streptavidin conjugate	1 mg	357	461
47250	mFluor™ Violet 545-streptavidin conjugate	100 ug	393	543
47252	mFluor™ Violet 550-streptavidin conjugate	100 ug	527	550
47260	mFluor™ Violet 590-streptavidin conjugate	100 ug	564	591
47272	mFluor™ Violet 610-streptavidin conjugate	100 ug	421	612

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