Fluorescent labels for DNA and RNA

Dyes available for oligonucleotide labeling

- High quality: double HPLC purification yields labeled oligonucleotides only
- Large selection of dyes including infrared dyes
- Double labeling for real-time PCR

product	absorption	emission	ε [cm^{-1} M^{-1}]	price class 5' labeling	price class 3' labeling	price class internal labeling
Pyrene	340 nm	376 nm	43000	1	2	6
Dansyl-X	340 nm	520 nm	4200	1	2	6
Alexa Fluor® 350	345 nm	440 nm	19000	5	5	7
AMCA -X	353 nm	442 nm	19000	1	2	6
Atto 390	390 nm	479 nm	24000	3	3	5
Alexa Fluor® 405	400 nm	424 nm	34000	5	5	7
Dy 415	418 nm	467 nm	34000	2	3	6
Hydroxy coumarin	419 nm	447 nm	36000	1	2	6
D-AMCA	432 nm	472 nm	56000	1	2	6
Alexa Fluor® 430 [1]	434 nm	541 nm	16000	5	5	7
Atto 425	436 nm	484 nm	45000	3	3	5
Atto 465	453 nm	508 nm	75000	3	3	5
Dabcyl	453 nm	none	32000	1	2	5
Dy 485 XL [1]	485 nm	560 nm	50000	2	3	6
Alexa Fluor® 488 [5]	490 nm	520 nm	71000	5	5	7
Fluorescein-5-EX	491 nm	515 nm	86000	1	2	6
BHQ-0	493 nm	none	34000	3	3	
FAM, 5-isomer	494 nm	520 nm	78000	2	3	6
Atto 495	495 nm	527 nm	80000	3	3	5
Dy 495	495 nm	520 nm	70000	2	3	6
FAM, 6-isomer	496 nm	516 nm	83000	2	3	6
IBApy 493/503	500 nm	509 nm	79000	5	5	7
Dy 480 XL [1]	500 nm	630 nm	50000	2	3	6
Atto 488	501 nm	523 nm	90000	3	3	5
IBApyFL	502 nm	510 nm	82000	5	5	7
Dy 505	505 nm	530 nm	80000	2	3	6
Dy 505-X	505 nm	530 nm	85000	2	3	6
Rhodamine 110X	505 nm	530 nm	85000	2	3	6
Dy 510 XL [1]	509 nm	590 nm	50000	2	3	6
Dy 481 XL [1]	515 nm	650 nm	50000	2	3	6
TET	519 nm	539 nm	98000	2	2	6
Dy 520 XL [1]	520 nm	664 nm	50000	2	3	6
JOE, 6-isomer	520 nm	548 nm	71000	2	3	6
Dy 521 XL [1]	523 nm	668 nm	50000	2	3	6
Carboxy-rhodamine 6G	524 nm	550 nm	102000	2	3	6
Carboxy-rhodamine 6G	524 nm	557 nm	108000	2	3	6
Atto 520	525 nm	545 nm	110000	3	3	5
Alexa Fluor® 532	525 nm	550 nm	81000	5	5	7
IBApy R6G	528 nm	547 nm	70000	5	5	7
Atto 532	532 nm	553 nm	115000	3	3	5
IBApy 530/550	534 nm	551 nm	77000	5	5	7
BHQ-1	534 nm	none	34000	3	3	
HEX	537 nm	556 nm	99000	2	2	3
Atto 540Q	542 nm	none	105000	3	3	5
IBApyTMR-X	544 nm	570 nm	56000	5	5	7
TAMRA , 5-isomer (FRET)	546 nm	579 nm	91000	2	3	6
TAMRA, 6-isomer	547 nm	573 nm	91000	2	3	6
Dy 555	547 nm	572 nm	100000	2	3	6
Quasar 570 [3]	547 nm	570 nm	115000	3	3	
Dy 556	548 nm	573 nm	100000	2	3	6
Cy3™ NHS	550 nm	570 nm	150000	3	4	6
Cy3™ Amidite	550 nm	570 nm	150000	3		
Dy 554	551 nm	572 nm	100000	2	3	6
Atto 550	554 nm	576 nm	120000	3	3	5
Alexa Fluor® 546	555 nm	570 nm	104000	5	5	7
Alexa Fluor® 555 [6]	555 nm	565 nm	158000	5	5	7
Oyster 556	556 nm	570 nm	155000	2	3	6
Dy 547 [3]	557 nm	574 nm	150000	2	3	6
Dy 548	558 nm	572 nm	150000	2	3	6
Dy 560	559 nm	578 nm	120000	2	3	6
Atto 565	563 nm	592 nm	120000	3	3	5
Carboxy-X-rhodamine	574 nm	602 nm	78000	2	3	6
Alexa Fluor® 568	575 nm	560 nm	91300	5	5	7
Carboxy-X-rhodamine	575 nm	602 nm	82000	2	3	6
BHQ-2	579 nm	none	38000	3	3	
Dy 590	580 nm	599 nm	120000	2	3	6
Cy3.5™ NHS	581 nm	596 nm	150000	3	4	6
Cy3.5™ Amidite	581 nm	596 nm	150000	3		
Sulforhodamine 101	583 nm	603 nm	116000	2	3	6

product	absorption	emission	ε [cm^{-1} M^{-1}]	price class 5' labeling	price class 3' labeling	price class internal labeling
Atto 580Q	586 nm	none	110000	3	3	5
Alexa Fluor® 594	590 nm	615 nm	92000	5	5	7
Atto 590	594 nm	624 nm	120000	3	3	5
Atto 594	601 nm	627 nm	120000	3	3	5
Dy 610	610 nm	630 nm	80000	2	3	6
Alexa Fluor® 610	612 nm	628 nm	138000	5	5	7
Atto 610 [2]	615 nm	634 nm	150000	3	3	5
Atto 612Q	615 nm	none	114000	3	3	5
Atto 620	619 nm	643 nm	120000	3	3	5
Dy 615	621 nm	641 nm	200000	2	3	6
Atto 633	629 nm	657 nm	130000	3	3	5
EVOblue™ 30	630 nm	670 nm	100000	2		
Alexa Flour® 633	632 nm	647 nm	100000	5	5	7
Atto 637 [2]	633 nm	658 nm	120000	3	3	5
Dy 634	635 nm	658 nm	200000	2	3	6
Dy 630	636 nm	657 nm	200000	2	3	6
Dy 631	637 nm	658 nm	200000	2	3	6
Dy 632	637 nm	657 nm	200000	2	3	6
Dy 633	637 nm	657 nm	200000	2	3	6
Atto 647-N [4]	644 nm	669 nm	150000	3	3	5
Quasar 670 [4]	644 nm	670 nm	187000	3	3	
Dy 636	647 nm	671 nm	200000	2	3	6
Oyster 645	645 nm	666 nm	250000	2	3	6
Dy 635	647 nm	671 nm	200000	2	3	6
Cy5™ NHS	649 nm	670 nm	250000	3	4	6
Cy5™ Amidite	649 nm	670 nm	250000	3		
Alexa Fluor® 647 [5]	650 nm	670 nm	239000	5	5	7
BBQ 650	598 nm	none	40667	5	3	6
Dy 647 [4]	653 nm	672 nm	250000	2	3	6
Dy 648	653 nm	674 nm	250000	2	3	6
Dy 650	653 nm	674 nm	220000	2	3	6
Dy 652	654 nm	675 nm	220000	2	3	6
Oyster 656	656 nm	674 nm	220000	2	3	6
Dy 651	656 nm	678 nm	220000	2	3	6
Alexa Fluor® 660	660 nm	690 nm	132000	5	5	7
DyQ 660	660 nm	none	140000	2	3	6
DyQ 661	662 nm	none	140000	2	3	6
Atto 655	663 nm	684 nm	125000	3	3	5
Methylene Blue	665 nm	690 nm	93000	(on request)		
BHQ-3	672 nm	none	42700	3	3	
Dy 677	673 nm	694 nm	180000	2	3	6
Dy 676	674 nm	699 nm	180000	2	3	6
Cy5.5™ NHS	675 nm	694 nm	250000	3	4	6
Cy5.5™ Amidite	675 nm	694 nm	250000	3		
Atto 680	680 nm	700 nm	125000	3	3	5
Alexa Fluor® 680	680 nm	700 nm	184000	5	5	7
Dy 680	690 nm	709 nm	140000	2	3	6
Dy 682	690 nm	709 nm	140000	2	3	6
Dy 681	691 nm	708 nm	140000	2	3	6
Atto 700	700 nm	718 nm	120000	3	3	5
Alexa Fluor® 700	702 nm	723 nm	192000	5	5	7
Dy 701	706 nm	731 nm	140000	2	3	6
Dy 700	707 nm	730 nm	140000	2	3	6
Atto 725 [2]	725 nm	752 nm	120000	3	3	5
Dy 730	732 nm	758 nm	240000	2	3	6
Dy 734	734 nm	766 nm	240000	2	3	6
Dy 731	736 nm	760 nm	240000	2	3	6
Dy 732	736 nm	759 nm	240000	2	3	6
Atto 740 [2]	740 nm	764 nm	120000	3	3	5
Dy 750	747 nm	776 nm	270000	2	3	6
Dy 752	748 nm	772 nm	270000	2	3	6
Cy7™ NHS	748 nm	767 nm	250000	3	4	6
Alexa Fluor® 750	749 nm	775 nm	240000	5	5	7
Dy 751	751 nm	779 nm	270000	2	3	6
Dy 776	771 nm	801 nm	240000	2	3	6
Dy 780	782 nm	800 nm	170000	2	3	6
Dy 782 (infrared!)	782 nm	800 nm	102000	2	3	6
Dy 781	783 nm	800 nm	170000	2	3	6
Dy 831	844 nm	none	220000	2	3	6

[1] dyes with large Stokes shift
[2] very base-sensitive, additional purification recommended
[3] very good alternative for Cy3
[4] very good alternative for Cy5
[5] only available with an additional Reverse Phase HPLC
[6] only available in combination with PAGE purification

www.oligo-specialist.com
oligo@iba-go.com

Oligo-Hotline 8 am - 8 pm:
0551 50672-141

www.iba-shop.com

Don't waste time by labeling oligos yourself:
send us your activated dye
and we do the labeling for you.
Highly efficient and fast.
Contact oligo@iba-go.com for a quote.

Price class (0.05 µmol scale)	1	2	3	4	5	6	7
Price in EUR*	38.50	48.50	64.00	71.00	79.00	90.00	100.00

*Prices valid starting January 1, 2009. Prices are subject to change without notice. Tax and transport not included.

Labels and modifications are normally delivered HPLC-purified. Nevertheless, some labels and modifications are subject to require further purification procedures, which will be added to the invoice: Please note, that e.g. Alexa Fluor® 488 and 647 labeled oligos are only available with an additional Reverse Phase HPLC. Alexa Fluor® 555 is only available in combination with PAGE purification.

IBA GmbH • Rudolf-Wissell-Str. 28 • D-37079 Göttingen • Germany • Phone: +49 (0) 551 50672-0 • Fax: +49 (0) 551 50672-181 • www.oligo-specialist.com • oligo@iba-go.com