

Reporter groups on oligonucleotides

Fluorescent oligonucleotides

IBA is not only a licensed supplier of a broad spectrum of probes labeled with dyes from Invitrogen or GE Healthcare, we now also offer an interesting selection of new dyes from Evotec OAI, Dyomics and Atto-Tec. The range of these new dyes includes e.g. Dy 782 which can be excited with infrared light allowing many new applications.

All probes are double HPLC purified*. Failure sequences are removed during the first HPLC; the second HPLC is performed to remove unlabeled oligonucleotides and excessive dye. As a result only labeled oligonucleotides of excellent quality are obtained.

*with the exception of the directly coupled dyes where no excessive dye must be eliminated

We offer

- High quality: double HPLC purification yields labeled oligonucleotides only
- A new selection of dyes including the infrared excitable Dy 782
- Very competitive prices

Dyes available for oligonucleotide labeling

Product	Abs (nm)	Emis (nm)	e
Pyrene	340	376	43000
Dansyl-X	340	520	4200
Alexa Fluor® 350	345	440	19000
AMCA -X	353	442	19000
Atto 390	390	479	24000
Alexa Fluor® 405	400	424	34000
Dy 415	418	467	34000
Hydroxy coumarin (HYCO)	419	447	36000
D-AMCA	432	472	56000
Alexa Fluor® 430	434	541	16000
Atto 425	436	484	45000
Atto 465	453	508	75000
Dabeyl	453	none	32000
Dy 485 XL	485	560	50000
Cy2™ NHS	489	506	150000
Cy2™	489	506	150000
Alexa Fluor® 488	490	520	71000
Fluorescein-5-EX	491	515	86000
BHQ-0	493	none	34000
FAM, 5-isomer	494	520	78000
Atto 495	495	527	80000
Dy 495	495	520	70000
FAM, 6-isomer	496	516	83000
IBAPy 493/503	500	509	79000
Dy 480 XL	500	630	50000
Atto 488	501	523	90000
IBAPy FL	502	510	82000
Dy 505	505	530	80000
Dy 505-X	505	530	85000
Rhodamine X	505	530	85000
Dy 510 XL	509	590	50000
Dy 481 XL	515	650	50000
TET	519	539	98000
Dy 520 XL	520	664	50000
JOE, 6-isomer	520	548	71000
Dy 521 XL	523	668	50000
Carboxy-rhodamine 6G, 6-isomer	524	550	102000
Carboxy-rhodamine 6G, 5-isomer	524	557	108000
Atto 520	525	545	110000
Alexa Fluor® 532	525	550	81000

Licensed supplier

of custom oligos labeled with dyes patented by Molecular Probes and Amersham Pharmacia Biotech

Spectral data have been provided by suppliers of the dyes and can vary with conjugation and solvent.



Product	Abs (nm)	Emis (nm)	e
IBApy R6G	528	547	70000
Atto 532	532	553	115000
IBApy 530/550	534	551	77000
BHQ-1	534	none	34000
HEX	537	556	99000
Atto 540Q	542	none	105000
IBApy TMR-X	544	570	56000
TAMRA, 5-isomer (FRET)	546	579	91000
TAMRA, 6-isomer	547	573	91000
Dy 555	547	572	100000
Quasar 570	547	570	115000
Dy 556	548	573	100000
Cy3 TM NHS	550	570	150000
Cy3 TM	550	570	150000
Dy 554	551	572	100000
Atto 550	554	576	120000
Alexa Fluor [®] 546	555	570	104000
Alexa Fluor [®] 555	555	565	150
Oyster 556	556	570	155000
Dy 547	557	574	150000
Dy 548	558	572	150000
Cy3B TM	558	572	130000
Dy 560	559	578	120000
Atto 565	563	592	120000
Carboxy-X-rhodamine, 5-isomer	574	602	78000
Alexa Fluor [®] 568	575	560	91300
Carboxy-X-rhodamine, 6-isomer	575	602	82000
BHQ-2	579	none	38000
Dy 590	580	599	120000
Cy3.5 TM NHS	581	596	150000
Cy3.5 TM	581	596	150000
Sulforhodamine 101	583	603	116000
Atto 580Q	586	none	110000
Alexa Fluor [®] 594	590	615	73
Atto 590	594	624	120000
Atto 594	601	627	120000
Dy 610	610	630	80000
Alexa Fluor [®] 610	612	628	138000
Atto 610	615	634	150000
Atto 612Q	615	none	114000
Atto 620	619	643	120000
Dy 615	621	641	200000
Atto 633	629	657	130000
EVOblue TM 30	630	670	100000
Alexa Fluor [®] 633	632	647	100000
Atto 637	633	658	120000
Dy 634	635	658	200000
Dy 630	636	657	200000
Dy 631	637	658	200000
Dy 632	637	657	200000
Dy 633	637	657	200000
Atto 647-N	644	669	150000
Quasar 670	644	670	187000
Dy 636	647	671	200000
Oyster 645	645	666	250000
Dy 635	647	671	200000
Cy5 TM NHS	649	670	250000
Cy5 TM	649	670	250000
Alexa Fluor [®] 647	650	670	239000
BBQ 650	598	none	40667
Dy 647	653	672	250000
Dy 648	653	674	250000
Dy 650	653	674	220000
Dy 652	654	675	220000
Oyster 656	656	674	220000
Dy 651	656	678	220000
Alexa Fluor [®] 660	660	690	132000
DyQ 660	660	none	140000
DyQ 661	662	none	140000
Atto 655	663	684	125000

Product	Abs (nm)	Emis (nm)	e
Methylene Blue (on request)	665	690	93000
BHQ-3	672	none	42700
Dy 677	673	694	180000
Dy 676	674	699	180000
Cy5.5™ NHS	675	694	250000
Cy5.5™	675	694	250000
Atto 680	680	700	125000
Alexa Fluor® 680	680	700	184000
Dy 680	690	709	140000
Dy 682	690	709	140000
Dy 681	691	708	140000
Atto 700	700	718	120000
Alexa Fluor® 700	702	723	192000
Dy 701	706	731	140000
Dy 700	707	730	140000
Atto 725	725	752	120000
Dy 730	732	758	240000
Dy 734	734	766	240000
Dy 731	736	760	240000
Dy 732	736	759	240000
Atto 740	740	764	120000
Dy 750	747	776	270000
Dy 752	748	772	270000
Cy7™ NHS	748	767	250000
Alexa Fluor® 750	749	775	240000
Dy 751	751	779	270000
Dy 776	771	801	240000
Dy 780	782	800	170000
Dy 782 (infrared!)	782	800	102000
Dy 781	783	800	170000
Dy 831	844	none	220000



Fluorescently labeled oligonucleotides are used for:

- Non-radioactive sequencing
- Mutation analysis
- Primer extension analysis
- Gene scan analysis
- Fragment analysis
- Multiplex PCR
- Quantitative PCR
- Online monitoring of PCR
- FCS-Spectroscopy
- *In situ* hybridization
- Screening
- Measuring ribozyme kinetics

IBA offers a broad spectrum of dyes for all of these applications.

References listing IBA as supplier:

- 1 Bernacchi S, Mély Y, 2001: Nucleic Acid Res, 29, 13 e62.
- 2 Foldes-Papp Z, Angerer B, Thyberg P, Hinz M, Wennmalm S, Ankenbauer W, Seliger H, Holmgren A, Rigler R. J Biotechnol 2001 Apr 13;86(3):203-24.