



biomers.net  
the biopolymer factory

## FLUORESCENT DYES

| DYE                   | ABS | EM  | QUENCHER |
|-----------------------|-----|-----|----------|
| AMCA                  | 353 | 420 |          |
| Alexa Fluor 405       | 401 | 421 |          |
| DY-405                | 400 | 423 |          |
| DY-350                | 354 | 433 |          |
| Alexa Fluor 350       | 346 | 442 |          |
| Pacific Blue          | 416 | 451 |          |
| Eterneon-350/455      | 350 | 455 |          |
| Marina Blue           | 362 | 459 |          |
| Coumarin 343          | 445 | 463 |          |
| DY-415                | 418 | 467 |          |
| Atto 390              | 390 | 479 |          |
| Eterneon-384/480      | 384 | 480 |          |
| LC Cyan 500           | 436 | 481 |          |
| Atto 425              | 436 | 484 |          |
| Eterneon-394/507      | 394 | 507 |          |
| Atto 465              | 453 | 508 |          |
| Cyanine 2             | 492 | 510 |          |
| Oregon Green 488      | 490 | 514 |          |
| DY-490                | 491 | 515 |          |
| Alexa Fluor 488       | 495 | 519 |          |
| Fam                   | 494 | 520 |          |
| DY-495                | 495 | 520 |          |
| Eterneon-393/523      | 393 | 523 |          |
| Atto 488              | 501 | 523 |          |
| Alexa Fluor 500       | 502 | 525 |          |
| Oregon Green 514      | 506 | 526 |          |
| Atto 495              | 495 | 527 |          |
| DY-505                | 505 | 530 |          |
| Rhodamin 110 (CR 110) | 504 | 532 |          |
| Rhodamin Green X      | 504 | 532 |          |
| Atto 514              | 511 | 533 |          |
| Tet                   | 521 | 536 |          |
| Atto 520              | 516 | 538 |          |
| Alexa Fluor 430       | 434 | 541 |          |
| Alexa Fluor 514       | 517 | 542 |          |
| CAL Fluor Gold 540    | 522 | 544 |          |
| Atto 430LS            | 433 | 547 |          |
| Joe                   | 520 | 548 |          |
| Yakima Yellow         | 526 | 548 |          |
| Rhodamin 6G           | 524 | 552 |          |
| Atto 532              | 532 | 554 |          |
| Alexa Fluor 532       | 532 | 554 |          |
| VIC                   | 538 | 554 |          |
| Hex                   | 535 | 556 |          |
| Sima                  | 535 | 556 |          |
| Atto 542              | 542 | 557 |          |
| CAL Fluor Orange 560  | 538 | 559 |          |
| DY-485XL              | 485 | 560 |          |
| Atto Rho 6G           | 535 | 560 |          |
| DY-530                | 539 | 561 |          |
| Alexa Fluor 555       | 555 | 565 |          |
| Quasar 570            | 548 | 566 |          |
| Cyanine 3             | 550 | 570 |          |
| Alexa Fluor 546       | 556 | 573 |          |
| DY-547P1              | 550 | 575 |          |
| NED                   | 553 | 575 |          |
| Tamra                 | 546 | 576 |          |
| DY-550                | 553 | 578 |          |
| DY-560                | 559 | 578 |          |
| Atto 550              | 554 | 579 |          |
| DY-555                | 555 | 580 |          |
| Rhodamin Red          | 560 | 580 |          |
| DY-510XL              | 509 | 590 |          |
| CAL Fluor RED 590     | 569 | 591 |          |
| Atto 565              | 563 | 592 |          |
| PET                   | 558 | 595 |          |
| Atto Rho 11           | 571 | 595 |          |
| DY-590                | 580 | 599 |          |
| Alexa Fluor 568       | 578 | 603 |          |
| Rox                   | 574 | 602 |          |
| Atto Rho 12           | 576 | 603 |          |
| Texas Red             | 583 | 603 |          |

BMN-Q460, Dabcyl, DDQ-I (400-530)

BMN-Q535, BHQ-1, TQ2 (480-580)

BMN-Q590, BHQ-2, TQ3 (550-650)

BMN-Q620, BMN-Q650, BBQ-650, DDQ-II (550-720)

| DYE               | ABS | EM  | QUENCHER |
|-------------------|-----|-----|----------|
| California Red    | 583 | 603 |          |
| Cyanine 3.5       | 588 | 604 |          |
| Sunnyvale Red     | 576 | 605 |          |
| DY-494XL          | 485 | 607 |          |
| Atto Rho 101      | 586 | 610 |          |
| CAL Fluor Red 610 | 590 | 610 |          |
| LC Red 610        | 590 | 610 |          |
| DY-594            | 594 | 615 |          |
| Alexa Fluor 594   | 590 | 617 |          |
| Atto 590          | 594 | 624 |          |
| Atto 594          | 601 | 627 |          |
| Chromeo 494       | 494 | 628 |          |
| Alexa Fluor 610   | 612 | 628 |          |
| DY-610            | 610 | 630 |          |
| DY-480XL          | 500 | 630 |          |
| Eterneon-480/635  | 480 | 635 |          |
| CAL Fluor Red 635 | 618 | 637 |          |
| LC Red 640        | 625 | 640 |          |
| DY-615            | 621 | 641 |          |
| Atto 620          | 619 | 643 |          |
| Atto Rho 14       | 625 | 646 |          |
| Alexa Fluor 633   | 632 | 647 |          |
| DY 481XL          | 515 | 650 |          |
| LIZ               | 638 | 655 |          |
| Atto 633          | 629 | 657 |          |
| DY-630            | 636 | 657 |          |
| DY-633            | 637 | 657 |          |
| DY-631            | 637 | 658 |          |
| Atto 490LS        | 496 | 661 |          |
| DY-520XL          | 520 | 664 |          |
| Atto 647N         | 646 | 664 |          |
| Alexa Fluor 647   | 650 | 665 |          |
| Quasar 670        | 647 | 667 |          |
| DY-521XL          | 523 | 668 |          |
| Cyanine 5         | 649 | 670 |          |
| Wellred D4        | 650 | 670 |          |
| LC Red 670        | 650 | 670 |          |
| DY-636            | 647 | 671 |          |
| DY-647P1          | 652 | 673 |          |
| DY-651            | 653 | 678 |          |
| Atto 655          | 663 | 684 |          |
| Alexa Fluor 660   | 663 | 690 |          |
| Cyanine 5.5       | 675 | 694 |          |
| DY-679            | 679 | 698 |          |
| DY-675            | 674 | 699 |          |
| DY-676            | 674 | 699 |          |
| Atto 680          | 680 | 700 |          |
| IRDye 700Dx       | 689 | 700 |          |
| Alexa Fluor 680   | 679 | 702 |          |
| Wellred D3        | 685 | 706 |          |
| DY-681            | 691 | 708 |          |
| DY-682            | 690 | 709 |          |
| LC Red 705        | 680 | 710 |          |
| Atto 700          | 700 | 719 |          |
| Alexa Fluor 700   | 702 | 723 |          |
| DY-700            | 707 | 730 |          |
| DY-701            | 706 | 731 |          |
| Atto 725          | 725 | 752 |          |
| DY-730            | 732 | 758 |          |
| DY-732            | 736 | 759 |          |
| Atto 740          | 740 | 764 |          |
| Wellred D2        | 750 | 770 |          |
| Cyanine 7         | 750 | 773 |          |
| Alexa Fluor 750   | 749 | 775 |          |
| DY-751            | 751 | 779 |          |
| IRDye 800CW       | 774 | 789 |          |
| DY-776            | 771 | 793 |          |
| DY-781            | 783 | 800 |          |
| DY-782            | 782 | 800 |          |

BMN-Q590, BHQ-2, TQ3 (550-650)

BMN-Q620, BMN-Q650, BBQ-650, DDQ-II (550-720)

| DYE      | ABS | QR        |
|----------|-----|-----------|
| DDQ I    | 430 | 400 - 530 |
| Dabcyl   | 453 | 400 - 530 |
| BMN-Q460 | 460 | 400 - 530 |
| TQ2      | 520 | 480 - 580 |
| BHQ-1    | 534 | 480 - 580 |
| BMN-Q535 | 535 | 480 - 580 |
| TQ3      | 570 | 550 - 650 |
| BHQ-2    | 580 | 550 - 650 |
| BMN-Q590 | 590 | 550 - 650 |
| BMN-Q620 | 620 | 480 - 720 |
| DDQ II   | 630 | 550 - 720 |
| BMN-Q650 | 650 | 550 - 720 |
| BBQ-650  | 650 | 550 - 720 |

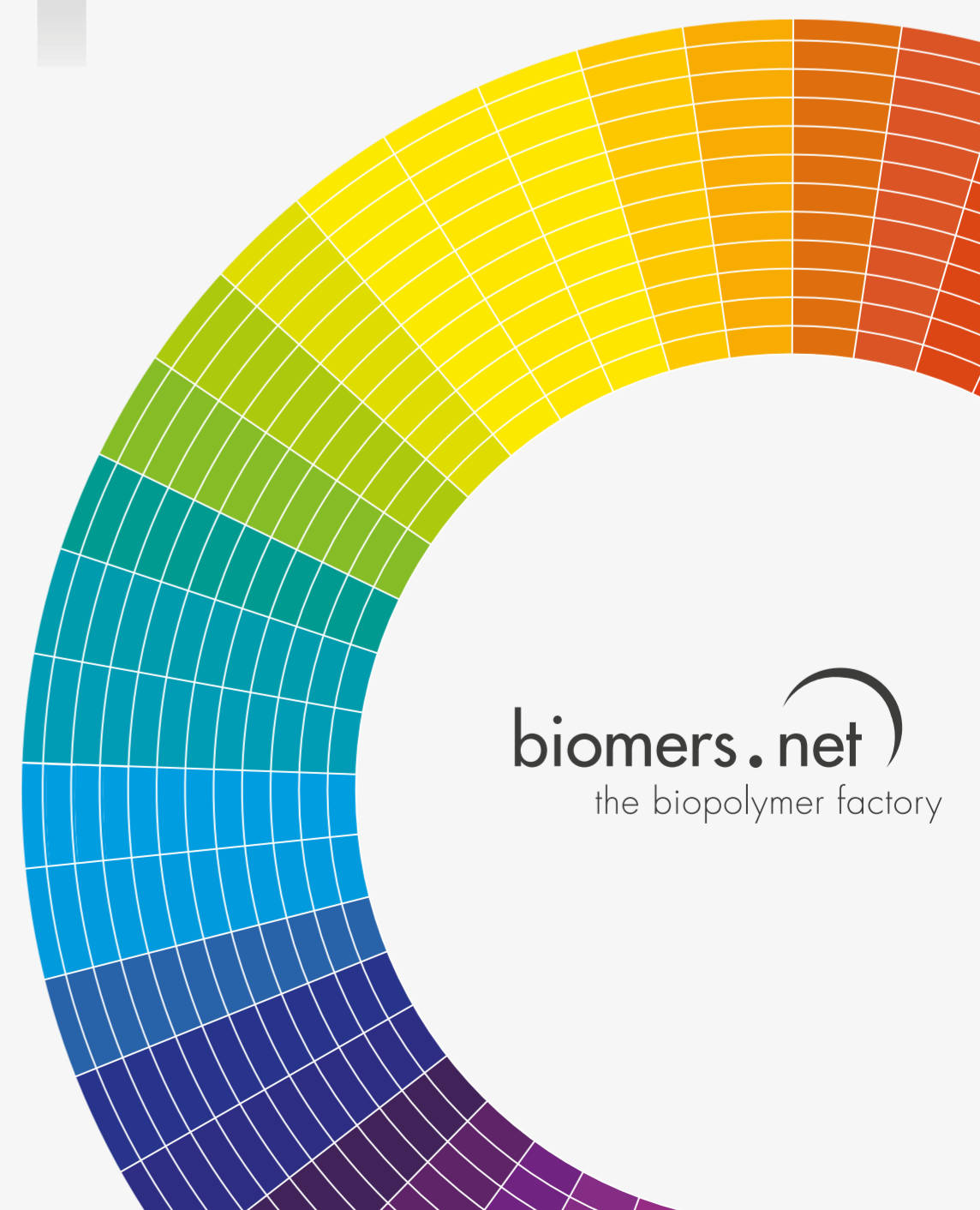
### FOR COMPARISON

| DYE           | ABS | EM  |
|---------------|-----|-----|
| DAPI          | 358 | 461 |
| SybrGreen     | 494 | 521 |
| EvaGreen      | 495 | 525 |
| GFP           | 475 | 509 |
| Phycoerythrin | 488 | 575 |
| Chlorophyll   | 430 | 669 |

Dye black: available  
Dye grey: not available

ABS: Absorption (max. nm)  
EM: Emission (max. nm)  
QR: Quenching Range (nm)

More information about licenses and trademarks:  
[www.biomers.net](http://www.biomers.net)



biomers.net  
the biopolymer factory

[www.biomers.net](http://www.biomers.net)

biomers.net GmbH | Söflinger Straße 100 | 89077 Ulm | Germany  
Tel +49 731 70 396 0 | Fax +49 731 70 396 11 | [info@biomers.net](mailto:info@biomers.net) | [www.biomers.net](http://www.biomers.net)

# ALTERNATIVE DYES

## THERMO FISHER [ALEXA DYES]

| DYE             | ABS | EM  | DYE         | ABS | EM  |
|-----------------|-----|-----|-------------|-----|-----|
| Alexa Fluor 350 | 346 | 442 | DY-350      | 354 | 433 |
| Alexa Fluor 405 | 401 | 421 | DY-405      | 400 | 423 |
| Alexa Fluor 430 | 434 | 541 | Atto 430LS  | 433 | 547 |
| Alexa Fluor 488 | 495 | 519 | Atto 488    | 501 | 523 |
| Alexa Fluor 500 | 502 | 525 | DY-490      | 491 | 515 |
|                 |     |     | Atto 488    | 501 | 523 |
| Alexa Fluor 514 | 517 | 542 | Atto 514    | 511 | 533 |
|                 |     |     | Tet         | 521 | 536 |
|                 |     |     | Joe         | 520 | 548 |
| Alexa Fluor 532 | 532 | 554 | Atto 532    | 532 | 554 |
| Alexa Fluor 546 | 556 | 573 | Cyanine 3   | 550 | 570 |
|                 |     |     | Atto 550    | 554 | 579 |
| Alexa Fluor 555 | 555 | 565 | Cyanine 3   | 550 | 570 |
|                 |     |     | Atto 550    | 554 | 579 |
| Alexa Fluor 568 | 578 | 603 | Cyanine 3.5 | 588 | 604 |
|                 |     |     | Atto Rho12  | 576 | 603 |
| Alexa Fluor 594 | 590 | 617 | DY-594      | 594 | 615 |
|                 |     |     | Atto 590    | 594 | 624 |
| Alexa Fluor 610 | 612 | 628 | Atto 594    | 601 | 627 |
|                 |     |     | DY-610      | 610 | 630 |
| Alexa Fluor 633 | 632 | 647 | Atto 633    | 629 | 657 |
| Alexa Fluor 647 | 650 | 665 | Atto 647N   | 644 | 669 |
|                 |     |     | Cyanine 5   | 649 | 670 |
| Alexa Fluor 660 | 663 | 690 | Atto 655    | 663 | 684 |
| Alexa Fluor 680 | 679 | 702 | Cyanine 5.5 | 675 | 694 |
|                 |     |     | DY-681      | 691 | 708 |
|                 |     |     | Atto 680    | 680 | 700 |
| Alexa Fluor 700 | 702 | 723 | Atto 700    | 700 | 719 |
|                 |     |     | DY-700      | 707 | 730 |
| Alexa Fluor 750 | 749 | 775 | Atto 740    | 740 | 764 |
|                 |     |     | Cyanine 7   | 750 | 773 |
|                 |     |     | DY-751      | 751 | 779 |
| Alexa Fluor 790 | 784 | 814 | DY-781      | 783 | 800 |

## THERMO FISHER [ABI DYES]

| DYE | ABS | EM  | DYE           | ABS | EM  |
|-----|-----|-----|---------------|-----|-----|
| VIC | 538 | 554 | Yakima Yellow | 526 | 548 |
|     |     |     | Atto 532      | 532 | 554 |
|     |     |     | Hex           | 535 | 556 |
| NED | 553 | 575 | Cyanine 3     | 550 | 570 |
|     |     |     | Atto 550      | 554 | 579 |
| PET | 558 | 595 | Atto 565      | 563 | 592 |
| LIZ | 638 | 655 | Atto 633      | 629 | 657 |

## ALTERNATIVE DYES

## BECKMAN [WELLRED DYES]

| DYE        | ABS | EM  | DYE         | ABS | EM  |
|------------|-----|-----|-------------|-----|-----|
| Wellred D4 | 650 | 670 | Atto 647N   | 644 | 669 |
|            |     |     | Cyanine 5   | 649 | 670 |
|            |     |     | DY-647P1    | 652 | 673 |
| Wellred D3 | 685 | 706 | Cyanine 5.5 | 675 | 694 |
|            |     |     | Atto 680    | 680 | 700 |
|            |     |     | DY-681      | 691 | 708 |
| Wellred D2 | 750 | 770 | Cyanine 7   | 750 | 773 |
|            |     |     | DY-751      | 751 | 779 |

## ALTERNATIVE DYES

## ROCHE [LIGHTCYCLER DYES]

| DYE             | ABS | EM  | DYE         | ABS | EM  |
|-----------------|-----|-----|-------------|-----|-----|
| LC 480 Cyan 500 | 450 | 500 | Atto 425    | 436 | 484 |
|                 |     |     | Atto 465    | 453 | 508 |
| LC Red 610      | 590 | 610 | DY-590      | 580 | 599 |
|                 |     |     | Rox         | 574 | 602 |
|                 |     |     | Atto Rho101 | 586 | 610 |
|                 |     |     | DY-594      | 594 | 615 |
| LC Red 640      | 625 | 640 | Atto 620    | 619 | 643 |
| LC Red 670      | 650 | 670 | Atto 647N   | 644 | 669 |
|                 |     |     | DY-647P1    | 652 | 673 |
|                 |     |     | Cyanine 5   | 649 | 670 |
| LC Red 705      | 680 | 710 | Cyanine 5.5 | 675 | 694 |
|                 |     |     | DY-681      | 691 | 708 |

## ALTERNATIVE DYES

## LICOR [IRDYES]

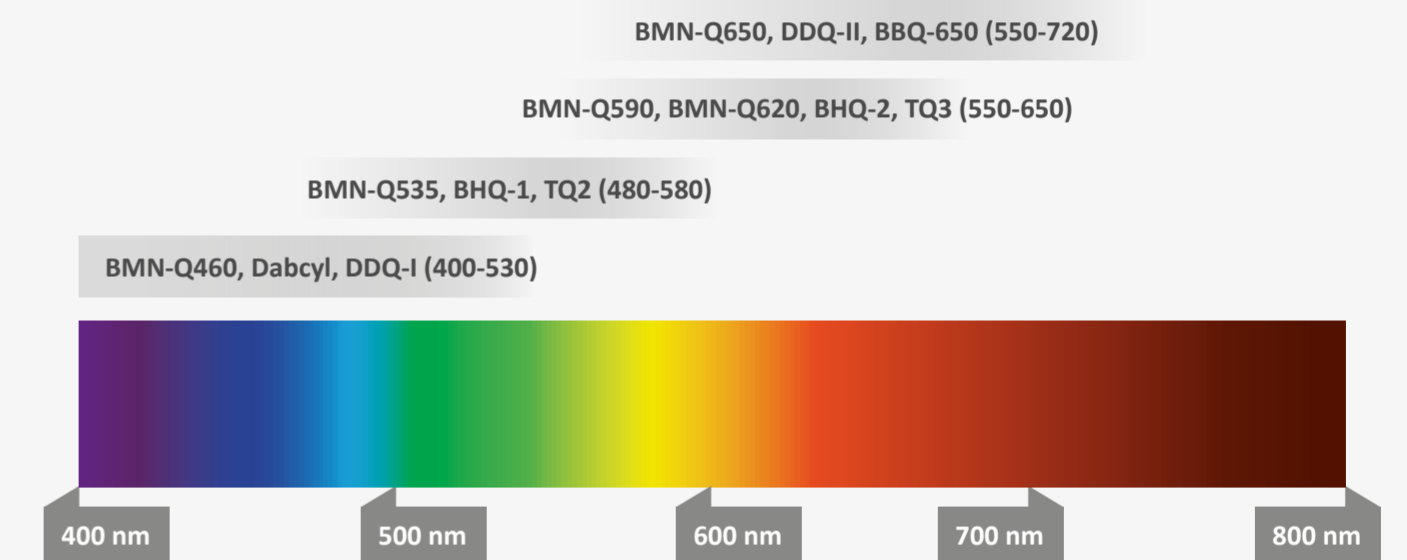
| DYE       | ABS | EM  | DYE      | ABS | EM  |
|-----------|-----|-----|----------|-----|-----|
| IRDye 700 | 689 | 700 | Atto 680 | 680 | 700 |
|           |     |     | DY-681   | 691 | 708 |
|           |     |     | DY-682   | 690 | 709 |
| IRDye 800 | 774 | 789 | DY-776   | 771 | 793 |
|           |     |     | DY-781   | 783 | 800 |
|           |     |     | DY-782   | 782 | 800 |

## ALTERNATIVE DYES

## LARGE STOKES SHIFT DYES / MEGASTOKES DYES

| DYE         | ABS | EM  | ε     |
|-------------|-----|-----|-------|
| Atto 430LS  | 433 | 547 | 32000 |
| DY-485XL    | 485 | 560 | 50000 |
| DY-510XL    | 509 | 590 | 50000 |
| DY-494XL    | 485 | 607 | 44000 |
| Chromeo 494 | 494 | 628 | 55000 |
| DY-480XL    | 500 | 630 | 50000 |
| DY-481XL    | 515 | 650 | 50000 |
| Atto 490LS  | 496 | 661 | 40000 |
| DY-520XL    | 520 | 664 | 50000 |
| DY-521XL    | 523 | 668 | 50000 |

ABS = absorption maximum (nm)  
EM = emission maximum (nm)  
ε = extinction coefficient (M\*cm-1)



For further information, please contact our customer support at any time.

Tel 0731 70 396 0 | [info@biomers.net](mailto:info@biomers.net)

