

BD PerCP-Cy5.5 and PerCP Conjugated Reagents

Originally developed and patented by BD Biosciences in 1989, BD™ PerCP products set the standard for PerCP reagents. We have applied our experience to offer researchers the most comprehensive line of PerCP-Cy™5.5 and PerCP conjugated reagents in the industry.

Features

- Compatible with all BD Biosciences benchtop flow cytometers
- High quality performance and lot-to-lot consistency backed by years of experience
- Comprehensive product offerings to support a broad range of applications
- Offerings address a range of specificities including human, mouse, rat, and non-human primate versions

| Features | PerCP | PerCP-Cy5.5 |
|--|---------------|---------------|
| Absorption max/emission max | 490 nm/677 nm | 490 nm/695 nm |
| Excitable by 488-nm laser | Yes | Yes |
| Spillover to PE Channel | Minimal | Minimal |
| Relative brightness on a BD FACS brand instruments | ++ | +++ |
| Sensitivity to visible light | Minimal | Minimal |
| Spillover to APC channel | ++ | + |

References:

- Shutt, F. Uber Perinineenfarbstoffe. *Ber. Deut. Bot. Ges.* 1890;8:9-32.
- Haxo FT, Kycia JH, Somers GF, Bennett A, Siegelman HW, Peridinin-Chlorophyll a Proteins of the Dinoflagellate *Amphidinium carterae* (Plymouth 450). *Plant Physiol.* 1976;57:297-303.

Peridinin-chlorophyll proteins (PerCP) are natural light-harvesting carotenoid-protein complexes derived from phytoplankton and first described well over 100 years ago.¹ Modern studies have shown these proteins to be able to absorb light preferentially in the blue-green spectrum² and to have a relatively large Stokes shift of emission.

BD Biosciences has a tremendous amount of experience in developing and manufacturing high performing flow cytometry conjugates of PerCP-Cy5.5 and PerCP that exhibit high lot-to-lot consistency. In fact, research at BD Biosciences led directly to development and commercialization of both PerCP-Cy5.5 (1997) and PerCP (1989) conjugates for flow cytometry.

BD Biosciences provides more than one hundred PerCP-Cy5.5 and PerCP conjugated reagents serving a variety of application areas and research fields. A wide range of specificities are available for human, mouse, rat, and non-human primate assays. Several anti-human antibodies are also available in RUO-GMP grade formulations.

For even more flexibility, streptavidin-conjugated PerCP-Cy5.5 and PerCP can be used as a second step for indirect immunofluorescence staining in combination with any biotinylated primary antibody of choice.

PerCP-Cy5.5 Tandem Conjugates

PerCP-Cy5.5 can be excited with a standard 488 nm laser and emits in the far red at 695 nm. There is no spectral overlap into the PE channel; thus, it is well suited for multicolor flow cytometry experiments with FITC, PE, and other fluorochrome conjugates. The tandem structure increases photostability, even when using more powerful lasers. PerCP-Cy5.5 is also a bright fluorescent marker, making it useful with less abundant antigens. In addition, since it causes less Fc-receptor-mediated non-specific staining than other tandem dyes, PerCP-Cy5.5 can be used when Fc receptors are present in the negative cell population.

Note: Depending upon instrument settings, some PerCP signal may be detected in the APC channel, requiring cross-laser compensation.

PerCP Conjugates

The PerCP dye can be excited by a standard 488 nm laser and emits at 677 nm. Spectral overlap into the PE channel is minimal. It is ideal for 3- or 4-color stains on any of the current BD FACS™ brand flow cytometers. Minimal excitation by red diode lasers, very low background, good stability, and consistent emission spectra ensure dependable performance of BD PerCP conjugates on benchtop single- and dual-laser instruments.

PerCP-conjugated reagents are not recommended for use with laser power greater than 150 mW.

BD PerCP-Cy5.5 and PerCP Conjugated Reagents

PerCP-Cy5.5

PerCP-Cy5.5 conjugated antibodies - Single Color/Pure

| DESCRIPTION | REACT | CLONE | ISOTYPE | APPS | REG | FORMAT | SIZE | CAT. NO. |
|--|----------------|--------------|-----------------------------|--------|-----------|-------------|-----------|----------|
| CD3 | Bab, Cyno, Rhe | SP34-2 | Ms IgG ₁ , λ | FCM | RUO | PerCP-Cy5.5 | 50 tests | 552852 |
| | Hu | SK7 | Ms IgG ₁ , κ | FCM | RUO (GMP) | PerCP-Cy5.5 | 50 tests | 340949 |
| CD3e (CD3 ε chain) | Ms | 145-2C11 | Ar Ham IgG1, κ | FCM | RUO | PerCP-Cy5.5 | 0.1 mg | 551163 |
| CD4 | Bab, Cyno, Rhe | L200 | Ms IgG ₁ , κ | FCM | RUO | PerCP-Cy5.5 | 50 tests | 552838 |
| | Hu | SK3 | Ms IgG ₁ , κ | FCM | RUO (GMP) | PerCP-Cy5.5 | 50 tests | 341654 |
| CD4 (L3T4) | Ms | RM4-5 | Rat IgG _{2a} , κ | FCM | RUO | PerCP-Cy5.5 | 0.1 mg | 550954 |
| CD5 | Hu | L17F12 | Ms IgG _{2a} , κ | FCM | RUO (GMP) | PerCP-Cy5.5 | 50 tests | 341089 |
| CD8 | Hu | SK1 | Ms IgG ₁ , κ | FCM | RUO (GMP) | PerCP-Cy5.5 | 50 tests | 341051 |
| CD8a (Ly-2) | Ms | 53-6.7 | Rat IgG _{2a} , κ | FCM | RUO | PerCP-Cy5.5 | 0.1 mg | 551162 |
| CD9 | Hu | M-L13 | Ms IgG ₁ , κ | FCM | RUO (GMP) | PerCP-Cy5.5 | 50 tests | 341649 |
| CD11b (Integrin α _M chain) | Ms | M1/70 | Rat IgG _{2b} , κ | FCM | RUO | PerCP-Cy5.5 | 0.1 mg | 550993 |
| CD14 | Hu | M5E2 | Ms IgG _{2a} , κ | FCM | RUO | PerCP-Cy5.5 | 0.1 mg | 550787 |
| CD16 | Hu | 3G8 | Ms IgG ₁ , κ | FCM | RUO (GMP) | PerCP-Cy5.5 | 50 tests | 338426 |
| CD19 | Ms | 1D3 | Rat IgG _{2a} , κ | FCM | RUO | PerCP-Cy5.5 | 0.1 mg | 551001 |
| | Hu | SJ25C1 | Ms IgG ₁ , κ | FCM | RUO (GMP) | PerCP-Cy5.5 | 50 tests | 340951 |
| CD20 | Hu | L27 | Ms IgG ₁ , κ | FCM | RUO (GMP) | PerCP-Cy5.5 | 50 tests | 340955 |
| CD20 (cytoplasmic) | Hu | H1 | Ms IgG _{2a} , κ | IC/FCM | RUO | PerCP-Cy5.5 | 50 tests | 558021 |
| CD25 (IL-2 Receptor α chain, p55) | Ms | PC61 | Rat IgG ₁ , λ | FCM | RUO | PerCP-Cy5.5 | 0.1 mg | 551071 |
| CD28 | Hu | L293 | Ms IgG ₁ , κ | FCM | RUO (GMP) | PerCP-Cy5.5 | 50 tests | 337181 |
| CD33 | Hu | P67.6 | Ms IgG ₁ , κ | FCM | RUO (GMP) | PerCP-Cy5.5 | 50 tests | 341650 |
| CD34 (gp 105-120) | | 8G12 | Ms IgG ₁ , κ | FCM | RUO (GMP) | PerCP-Cy5.5 | 50 tests | 347203 |
| CD38 | Hu | HIT2 | Ms IgG ₁ , κ | FCM | RUO | PerCP-Cy5.5 | 0.1 mg | 551400 |
| CD41a | | HIP8 | Ms IgG ₁ , κ | FCM | RUO (GMP) | PerCP-Cy5.5 | 50 tests | 340931 |
| CD45 | Cyno, Rhe | TU116 | Ms IgG ₁ , κ | FCM | RUO | PerCP-Cy5.5 | 50 tests | 552724 |
| CD45 (Leukocyte Common Antigen) | Hu | 2D1 | Ms IgG ₁ , κ | FCM | RUO (GMP) | PerCP-Cy5.5 | 50 tests | 340953 |
| CD45 (Leukocyte Common Antigen, Ly-5) | Ms | 30-F11 | Rat IgG _{2b} , κ | FCM | RUO | PerCP-Cy5.5 | 0.1 mg | 550994 |
| CD45.2 | Ms | 104 | Ms IgG _{2a} , κ | FCM | RUO | PerCP-Cy5.5 | 0.1 mg | 552950 |
| CD45R/B220 | Ms | RA3-6B2 | Rat IgG _{2a} , κ | FCM | RUO | PerCP-Cy5.5 | 0.1 mg | 552771 |
| CD69 (Very Early Activation Antigen) | Ms | H1.2F3 | Ar Ham IgG1, λ ₃ | FCM | RUO | PerCP-Cy5.5 | 0.1 mg | 551113 |
| CD79a (Igα, mb-1) | Hu | HM47 | Ms IgG ₁ , κ | FCM | RUO (GMP) | PerCP-Cy5.5 | 50 tests | 341643 |
| CD117 (c-kit) | Hu | 104D2 | Ms IgG ₁ , κ | FCM | RUO (GMP) | PerCP-Cy5.5 | 50 tests | 333944 |
| CD123 (IL-3 Receptor α chain) | Hu | 7G3 | Ms IgG _{2a} , κ | FCM | RUO | PerCP-Cy5.5 | 100 tests | 558714 |
| CD138 (Syndecan-1) | Hu | MI15 | Ms IgG ₁ , κ | FCM | RUO (GMP) | PerCP-Cy5.5 | 50 tests | 341087 |
| CD209 (DC-SIGN) | Hu | DCN46 | Ms IgG _{2b} , κ | FCM | RUO | PerCP-Cy5.5 | 100 tests | 558263 |
| CD326 (EPCAM) | Hu | EBA-1 | Ms IgG ₁ , λ | FCM | RUO (GMP) | PerCP-Cy5.5 | 50 tests | 347199 |
| ERK1/2 (pT202/pY204) | Hu, Ms, Rat | 20A | Ms IgG ₁ | IC/FCM | RUO | PerCP-Cy5.5 | 50 tests | 560115 |
| HLA-DR | Bab, Cyno, Rhe | G46-6 (L243) | Ms IgG _{2a} , κ | FCM | RUO | PerCP-Cy5.5 | 50 tests | 552764 |
| | Hu | L243 | Ms IgG _{2a} , κ | FCM | RUO (GMP) | PerCP-Cy5.5 | 50 tests | 339194 |
| IgM | Ms | R6-60.2 | Rat IgG _{2a} , κ | FCM | RUO | PerCP-Cy5.5 | 0.1 mg | 550881 |
| Ly-6G and Ly-6C (Gr-1) | Ms | RB6-8C5 | Rat IgG _{2b} , κ | FCM | RUO | PerCP-Cy5.5 | 0.1 mg | 552093 |
| NK-1.1 (NKR-P1B and NKR-P1C) | Ms | PK136 | Ms IgG _{2a} , κ | FCM | RUO | PerCP-Cy5.5 | 0.1 mg | 551114 |
| Stat1 (pY701) | Hu | 4a | Ms IgG _{2a} | IC/FCM | RUO | PerCP-Cy5.5 | 50 tests | 560113 |
| Stat3 (pY705) | Hu | 4P-STAT3 | Ms IgG _{2a} | IC/FCM | RUO | PerCP-Cy5.5 | 50 tests | 560114 |
| Stat5 (pY694) | Hu | 47 | Ms IgG ₁ | IC/FCM | RUO | PerCP-Cy5.5 | 50 tests | 560118 |
| Streptavidin-Peridinin Chlorophyll-a Protein-Cy5.5 (SAV-PerCP-Cy5.5) | | Streptavidin | | FCM | RUO | PerCP-Cy5.5 | 0.1 mg | 551419 |

BD PerCP-Cy5.5 and PerCP Conjugated Reagents

PerCP-Cy5.5

PerCP-Cy5.5 Isotype Controls/Lysates

| DESCRIPTION | CLONE | ISOTYPE | APPS | REG | FORMAT | SIZE | CAT. NO. |
|--|--------------|---------------------------|------|-----------|-------------|-----------|----------|
| Hamster IgG1, κ (anti-TNP) | A19-3 | Ar Ham IgG1, κ | FCM | RUO | PerCP-Cy5.5 | 0.1 mg | 550763 |
| Mouse IgG ₁ | X40 | Ms IgG ₁ , κ | FCM | RUO (GMP) | PerCP-Cy5.5 | 50 µg | 347202 |
| Mouse IgG ₁ , κ | MOPC-21 | Ms IgG ₁ , κ | FCM | RUO | PerCP-Cy5.5 | 50 tests | 552834 |
| Mouse IgG ₁ , κ (Unknown specificity) | MOPC-21 | Ms IgG ₁ , κ | FCM | RUO | PerCP-Cy5.5 | 0.1 mg | 550795 |
| Mouse IgG _{2a} , κ | MOPC-173 | Ms IgG _{2a} | FCM | RUO | PerCP-Cy5.5 | 50 tests | 558020 |
| Mouse IgG _{2a} , κ (Specific for TNP) | G155-178 | Ms IgG _{2a} , κ | FCM | RUO | PerCP-Cy5.5 | 0.1 mg | 550927 |
| | | | FCM | RUO | PerCP-Cy5.5 | 50 tests | 552577 |
| Mouse IgG _{2b} , κ (Specific for dansyl) | 27-35 | Ms IgG _{2b} , κ | FCM | RUO | PerCP-Cy5.5 | 100 tests | 558304 |
| Rat IgG ₁ , λ | A110-1 | Rat IgG ₁ , λ | FCM | RUO | PerCP-Cy5.5 | 0.1 mg | 551072 |
| Rat IgG _{2a} , κ | R35-95 | Rat IgG _{2a} , κ | FCM | RUO | PerCP-Cy5.5 | 0.1 mg | 550765 |
| Rat IgG _{2b} , κ | A95-1 | Rat IgG _{2b} , κ | FCM | RUO | PerCP-Cy5.5 | 0.1 mg | 550764 |
| Streptavidin-Peridinin Chlorophyll-a Protein-Cy5.5 (SAV-PerCP-Cy5.5) | Streptavidin | | FCM | RUO | PerCP-Cy5.5 | 0.1 mg | 551419 |

Flow Cytometry Support

| DESCRIPTION | APPS | REG | FORMAT | SIZE | CAT. NO. |
|---------------------------------|------|-----|-------------|----------|----------|
| BD Calibrite™ PerCP-Cy5.5 Beads | FCM | IVD | PerCP-Cy5.5 | 25 tests | 345036 |

PerCP

PerCP conjugated antibodies - Single ColorPure

| DESCRIPTION | REACT | CLONE | ISOTYPE | APPS | REG | FORMAT | SIZE | CAT. NO. |
|--|----------------|--------------|---------------------------|------|-----------|--------|-----------|----------|
| CD3 | Hu | SK7 | Ms IgG ₁ , κ | FCM | RUO (GMP) | PerCP | 100 tests | 347344 |
| | Bab, Cyno, Rhe | SP34-2 | Ms IgG ₁ , λ | FCM | RUO | PerCP | 50 tests | 552851 |
| CD3e (CD3 ε chain) | Ms | 145-2C11 | Ar Ham IgG1, κ | FCM | RUO | PerCP | 0.1 mg | 553067 |
| CD4 | Bab, Cyno, Rhe | L200 | Ms IgG ₁ , κ | FCM | RUO | PerCP | 50 tests | 550631 |
| | Hu | SK3 | Ms IgG ₁ , κ | FCM | RUO (GMP) | PerCP | 100 tests | 347324 |
| CD4 (L3T4) | Ms | RM4-5 | Rat IgG _{2a} , κ | FCM | RUO | PerCP | 0.1 mg | 553052 |
| CD5 (Ly-1) | Ms | 53-7.3 | Rat IgG _{2a} , κ | FCM | RUO | PerCP | 0.1 mg | 553025 |
| CD8 | Hu | SK1 | Ms IgG ₁ , κ | FCM | RUO (GMP) | PerCP | 100 tests | 347314 |
| CD8a | Rat | OX-8 | Ms IgG ₁ , κ | FCM | RUO | PerCP | 0.1 mg | 558824 |
| CD8a (Ly-2) | Ms | 53-6.7 | Rat IgG _{2a} , κ | FCM | RUO | PerCP | 0.1 mg | 553036 |
| CD14 | Hu | M P9 | Ms IgG _{2b} , κ | FCM | RUO (GMP) | PerCP | 50 tests | 340585 |
| CD19 | Hu | 4G7 | Ms IgG ₁ , κ | FCM | RUO (GMP) | PerCP | 100 tests | 347544 |
| | Hu | SI25C1 | Ms IgG ₁ , κ | FCM | RUO (GMP) | PerCP | 50 tests | 340421 |
| CD20 | Hu | L27 | Ms IgG ₁ , κ | FCM | RUO (GMP) | PerCP | 100 tests | 347674 |
| CD34 (gp 105-120) | Hu | 8G12 | Ms IgG ₁ , κ | FCM | RUO (GMP) | PerCP | 50 tests | 340430 |
| CD42a | Hu | Beb1 | Ms IgG ₁ , κ | FCM | RUO (GMP) | PerCP | 50 tests | 340537 |
| CD45 | Rhe, Cyno | TU116 | Ms IgG ₁ , κ | FCM | RUO | PerCP | 50 tests | 557513 |
| CD45 (Leukocyte Common Antigen) | | 2D1 | Ms IgG ₁ , κ | FCM | RUO (GMP) | PerCP | 100 tests | 347464 |
| CD45 (Leukocyte Common Antigen, Ly-5) | Ms | 30-F11 | Rat IgG _{2b} , κ | FCM | RUO | PerCP | 0.1 mg | 557235 |
| CD45 (Pan Leukocyte, NHP-specific) | Bab, Cyno, Rhe | DO58-1283 | Ms IgG ₁ , κ | FCM | RUO | PerCP | 50 tests | 558411 |
| CD45R/B220 | Ms, Hu | RA3-6B2 | Rat IgG _{2a} , κ | FCM | RUO | PerCP | 0.1 mg | 553093 |
| CD61 (Integrin β ₃ chain) | | RUU-PL7F12 | Ms IgG ₁ , κ | FCM | RUO (GMP) | PerCP | 50 tests | 340506 |
| CD69 (Very Early Activation Antigen) | Hu | L78 | Ms IgG ₁ , κ | FCM | RUO (GMP) | PerCP | 50 tests | 340548 |
| CD90.1 (Thy-1.1) | Ms, Rat | OX-7 | Ms IgG ₁ , κ | FCM | RUO | PerCP | 0.1 mg | 557266 |
| HLA-DR | Hu | L243 | Ms IgG _{2a} , κ | FCM | RUO (GMP) | PerCP | 100 tests | 347364 |
| IgG ₁ | Ms | X56 | Rat IgG ₁ , κ | FCM | RUO (GMP) | PerCP | 100 tests | 340272 |
| IgG _{2a+b} | Ms | X57 | Rat IgG ₁ , κ | FCM | RUO (GMP) | PerCP | 100 tests | 340271 |
| RT1B | Rat | OX-6 | Ms IgG ₁ , κ | FCM | RUO | PerCP | 0.1 mg | 557016 |
| Streptavidin-Peridinin Chlorophyll-a Protein (SAV-PerCP) | | Streptavidin | | FCM | RUO | PerCP | 0.1 mg | 554064 |
| Streptavidin-Peridinin Chlorophyll-a Protein-Cy5.5 (SAV-PerCP-Cy5.5) | | Streptavidin | | FCM | RUO (GMP) | PerCP | 50 tests | 340130 |
| TCR ab | Rat | R73 | Ms IgG ₁ , κ | FCM | RUO | PerCP | 0.1 mg | 557019 |

Unless otherwise specified, all products are for Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale. All applications are either tested in-house or reported in the literature. See Technical Data Sheets for details. Prices are subject to change without notice.

BD PerCP-Cy5.5 and PerCP Conjugated Reagents

PerCP Isotype Controls/Lysates

| DESCRIPTION | CLONE | ISOTYPE | APPS | REG | FORMAT | SIZE | CAT. NO. |
|--|----------|---------------------------|------|-----------|--------|----------|----------|
| Hamster IgG1, κ (anti-TNP) | A19-3 | Ar Ham IgG1, κ | FCM | RUO | PerCP | 0.1 mg | 553975 |
| Mouse IgG ₁ | X40 | Ms IgG ₁ , κ | Ctrl | RUO (GMP) | PerCP | 100 µg | 349044 |
| Mouse IgG ₁ , κ | MOPC-31C | Ms IgG ₁ , κ | FCM | RUO | PerCP | 0.1 mg | 550672 |
| Mouse IgG ₁ , κ (Unknown specificity) | MOPC-21 | Ms IgG ₁ , κ | FCM | RUO | PerCP | 50 tests | 559425 |
| Mouse IgG _{2a} | X39 | Ms IgG _{2a} , κ | Ctrl | RUO (GMP) | PerCP | 100 µg | 349054 |
| Rat IgG _{2a} , κ | R35-95 | Rat IgG _{2a} , κ | FCM | RUO | PerCP | 0.1 mg | 553933 |
| Rat IgG _{2b} , κ | A95-1 | Rat IgG _{2b} , κ | FCM | RUO | PerCP | 0.1 mg | 552991 |

Flow Cytometry Support

| DESCRIPTION | APPS | REG | FORMAT | SIZE | CAT. NO. |
|--------------------------|------|-----|--------|----------|----------|
| BD Calibrite PerCP Beads | FCM | IVD | PerCP | 25 tests | 340497 |



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