

Ly-6A/E (Sca-1) Monoclonal Antibody (D7), Brilliant Violet™ 711, eBioscience™

Product Details	
Size	25 µg
Species Reactivity	Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Brilliant Violet™ 711, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	D7
Conjugate	Brilliant Violet™ 711
Excitation/Emission Max	406/711 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2925593

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	1.0 µg/test	-

Product Specific Information

Description: The D7 monoclonal antibody reacts with mouse Sca-1, an 18 kDa member of the Ly-6 family of GPI-linked surface proteins. D7 reacts with both Ly-6E.1 and Ly-6A.2 molecules expressed by mouse hematopoietic stem cells, myeloid population and peripheral T and B cells. Non-activated splenocytes from Ly-6.2 strains including C57BL, SJL, 129, AKR, and others demonstrate higher frequency of D7-positive cells compared to the Ly-6.1 strains such as BALB/c, C3H, NZB and others. Sca-1 is expressed at high levels upon activation regardless of the Ly-6 haplotype. The Ly-6 family is involved in regulation and function of T cell activation. Sca-1 is a major phenotypic marker for mouse hematopoietic progenitor/stem cell subset.

Applications Reported: This D7 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This D7 antibody has been tested by flow cytometric analysis of mouse bone marrow cells. This may be used at less than or equal to 1.0 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Brilliant Violet™ 711 (BV711) is a tandem dye that emits at 713 nm and is intended for use on cytometers equipped with a violet (405 nm) laser. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright, Brilliant Violet™, Brilliant Ultra Violet™, or other polymer dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Complete Staining Buffer (Product # SB-4401-42) or Brilliant Stain Buffer™ (Product # 00-4409-75) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super

Bright Staining Buffer or Brilliant Stain Buffer for more information.

Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

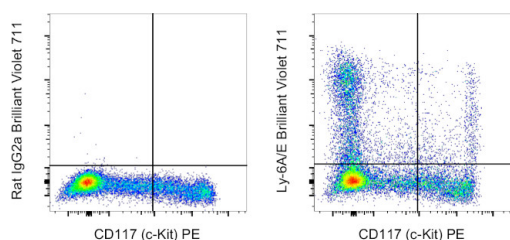
Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222-49) (100 μ L of cell sample + 100 μ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333-54) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone-specific performance should be determined empirically.

Our internal testing suggests that Brilliant Violet™ 711 (BV711) is not compatible with methanol-based fixation.

Excitation: 407 nm; Emission: 713 nm; Laser: Violet Laser.

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Product Images For Ly-6A/E (Sca-1) Monoclonal Antibody (D7), Brilliant Violet™ 711, eBioscience™



Ly-6A/E (Sca-1) Antibody (407-5981-80) in Flow

C57BL/6 mouse bone marrow cells were stained with CD117 (c-Kit) Monoclonal Antibody, PE (Product # 12-1171-82), Mouse Hematopoietic Lineage Antibody Cocktail, eFluor 450 (Product # 88-7772-72) and 0.5 μ g of Rat IgG2a kappa Isotype Control, Brilliant Violet 711 (Product # 407-4321-81) (left) or 0.5 μ g of Ly-6A/E (Sca-1) Monoclonal Antibody, Brilliant Violet 711 (right). Viable lineage-negative/low cells were used for analysis, as determined by 7-AAD (Product # 00-6993-50).

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