

Human Transitional/Immature B cells Panel

Catalog Number: RK40021

Size: 1 Box

◆ Description

The 7-fluorescence Human Transitional/Immature B cells Panel has been designed for identify and phenotype B cells in Human blood or tissue samples.

ABflo® multi-fluorescence panel RK40021 covers the core CD markers of CD45, CD19, CD10, CD38, CD21 and IgD. Our plots showed clear subgroups of CD10⁺CD38⁺IgD⁺ transitional B cells, CD10⁻CD38⁻IgD⁺ unswitched B cells, CD10⁻CD38⁻IgD⁻ memory B cells, CD10⁻CD38^{high}IgD⁻ plasmablasts, CD10⁻CD38⁻CD27⁻IgD⁺ naïve, CD10⁻CD38⁻CD27⁺IgD⁺ marginal zone B cells and AM/TLM/IM/RM Memory B cells (cite figures).

◆ Applications

FC

◆ Reactivity

Human

◆ Components

Target	Catalog No.	Fluorochrome	Ex/Em (nm)	Isotype	Clone	Size	Vol. Per Test
CD45	A25195	ABflo®450	406/445	Rabbit IgG	ARC5024-ABflo450	100T	5 µL
CD19	A26823	PerCP/Cyanine 5.5	482/482	Rabbit IgG	ARC57915-PerCP-Cy5.5	100T	5 µL
CD10	A26865	FITC	491/516	Rabbit IgG	ARC55330-FITC	100T	5 µL

IgD	A26481	ABflo®610	421/612	Rabbit IgG	ARC60051-ABflo610	100T	5 µL
CD38	A27140	ABflo®700	690/713	Rabbit IgG	ARC5131-01-ABflo700	100T	5 µL
CD21	A25702	PE	565/574	Rabbit IgG	ARC56643-PE	100T	5 µL
CD27	A22064	ABflo®647	648/664	Rabbit IgG	ARC54542-ABflo647	100T	5 µL

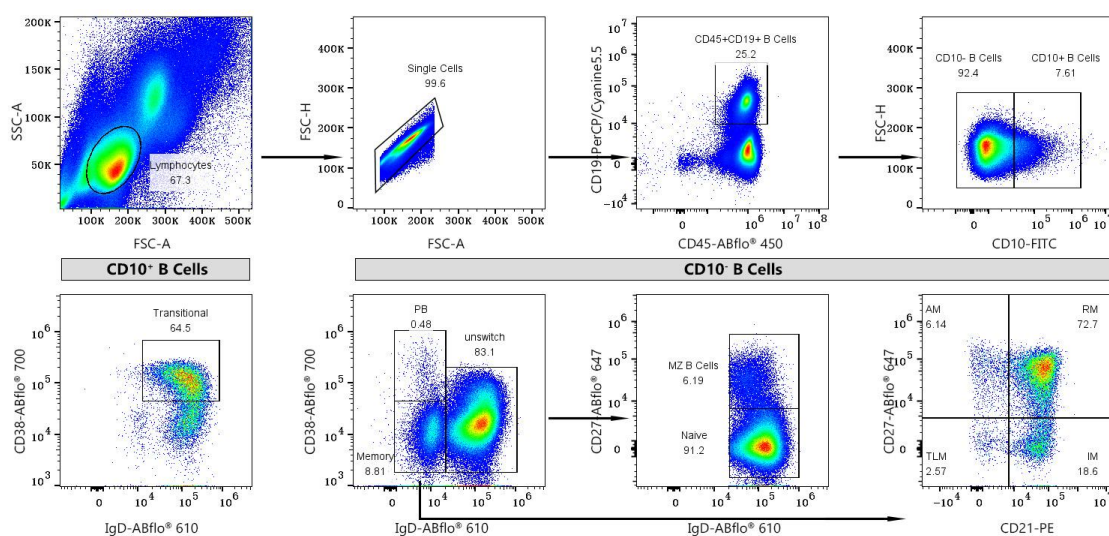
Note:

This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1×10^6 cells in a 100 µl experimental sample (a test).

◆ Storage

Store at 4°C. Avoid freeze/thaw cycles.

◆ Validation Data



Multicolor flow cytometry panel to identify Human B cell subsets. Human PBMC were surface stained with ABflo® 450 Rabbit anti-Human CD45 mAb (A25195,5 µL/Test), PerCP/Cyanine5.5 Rabbit anti-Human/Monkey CD19 mAb (A26823,5 µL/Test), FITC Rabbit anti-Human CD10 mAb (A26865,5 µL/Test), ABflo® 610 Rabbit anti-Human IgD mAb (A26481,5 µL/Test), ABflo® 700 Rabbit anti-Human CD38 mAb (A27140,5 µL/Test), PE Rabbit anti-Human CR2/CD21 mAb (A25702,5 µL/Test), ABflo® 647 Rabbit anti-Human CD27 mAb (A22064,5 µL/Test). All antibodies are validated for Flow cytometry. B cells are defined as CD45⁺CD19⁺. A major B cell subset discrimination is based on CD10 and, therefore, B cells were divided into CD10⁻ and CD10⁺ subpopulations. CD10⁺ B cells can be further

refined into transitional B cells (CD38⁺IgD⁺); CD10⁻ B cells comprise IgD⁺ unswitched B cells (CD38⁻IgD⁺), memory B cells (CD38⁻IgD⁻) and plasmablasts (PB; CD38^{high}IgD⁻). The unswitched IgD⁺ fraction can be further divided in naïve (CD27⁻IgD⁺) and marginal zone (MZ) B cells (CD27⁺IgD⁺); Memory B cells can be further divided in activated memory (AM), tissue-like memory (TLM), intermediate memory (IM) and resting memory(RM) by expression patterns of CD21 and CD27.