

# NEW!

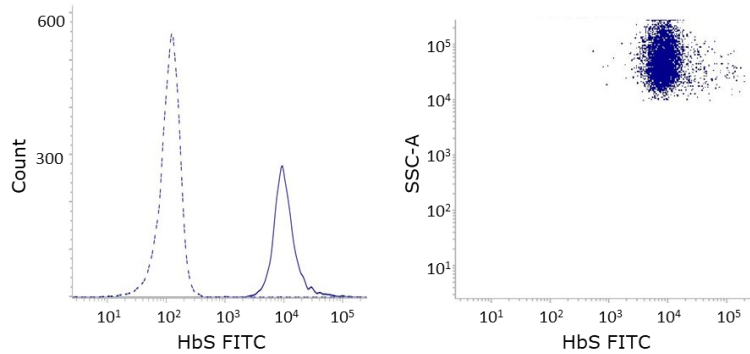
## Hemoglobin antibodies



We offer antibodies to detect various types of hemoglobin. Each antibody can be used individually or combined in a panel with anti-HbS FITC, anti-panHb APC and anti-HbF Dy-410 for three lasers, eliminating the need for compensation.

### Anti-hemoglobin S FITC

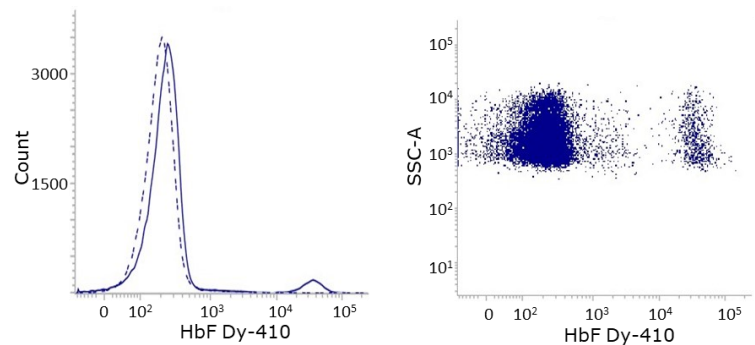
The antibody anti-hemoglobin S (HbS) recognizes the abnormal  $\beta$ -chain of hemoglobin S. Substitution of the amino acid valin for glutamic acid in the sixth position of the  $\beta$ -globin chain results in the formation of a  $\beta^S$  subunit. Due to the mutated subunit  $\beta^S$ , hemoglobin becomes unstable when no oxygen is bound, resulting in sickle shaped erythrocytes.



**Figure 1.** Flow cytometry analysis of whole blood stained with anti-hemoglobin S. Histograms: uninterrupted line represents HbS<sup>high</sup> sample, interrupted line represents blanc sample.

### Anti-hemoglobin F Dy-410\*

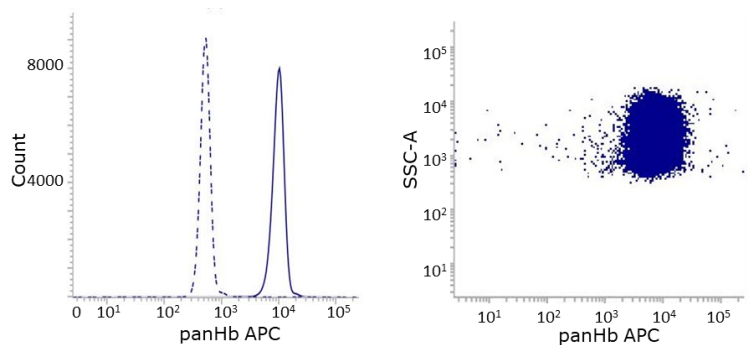
The antibody anti-hemoglobin F recognizes the  $\gamma$ -chain of hemoglobin F (HbF). HbF is predominantly expressed by fetal erythrocytes and in some cases, HbF is also expressed by adult erythrocytes. These cells, so called F-cells, can represent up to 25 % of the total erythrocyte population.



**Figure 2.** Flow cytometry analysis of whole blood stained with anti-hemoglobin F. Histograms: uninterrupted line represents stained sample, interrupted line represents blanc sample.

### Anti-pan hemoglobin APC

The antibody anti-pan hemoglobin (panHb) recognizes the  $\alpha$ -chain of human hemoglobin. This antibody can be combined with other antibodies to determine the percentage of pathological forms of hemoglobin of the total hemoglobin content.



**Figure 3.** Flow cytometry analysis of whole blood stained with anti-pan hemoglobin. Histograms: uninterrupted line represents stained sample, interrupted line represents blanc sample.

Item	Clone	Description	Regulatory status	Package size	Product code
Anti-HbS FITC	57-8	Anti-hemoglobin S (HbS) antibody conjugated with fluorochrome FITC	ASR	1.0 mL (50 µg/mL)	IQP-574F
Anti-HbF1 Dy-410	WBAC HbF1	Anti-hemoglobin F (HbF1) antibody conjugated with fluorochrome Dy-410	ASR	1.0 mL (50 µg/mL)	IQP-567D
Anti-HbF1 FITC	WBAC HbF1	Anti-hemoglobin F (HbF1) antibody conjugated with fluorochrome FITC	ASR	1.0 mL (50 µg/mL)	IQP-567F
Anti-HbF1 R-PE	WBAC HbF1	Anti-hemoglobin F (HbF1) antibody conjugated with fluorochrome R-PE	ASR	1.0 mL (50 µg/mL)	IQP-567R
Anti-panHb APC	PHB1	Anti-pan hemoglobin (panHb) antibody conjugated with fluorochrome APC	ASR	1.0 mL (50 µg/mL)	IQP-575A
<b>Related products</b>					
Item	Clone	Description	Regulatory status	Package size	Product code
Anti-RhD APC	BRAD3	Anti-RhD antibody conjugated with fluorochrome APC	RUO	1.0 mL (100 tests)	IQP-556A
Anti-RhD R-PE	NaTH109-1G2	Anti-RhD antibody conjugated with fluorochrome R-PE	RUO	1.0 mL (100 tests)	IQP-513R
CD71 FITC	DF1513	CD71 antibody conjugated with fluorochrome FITC	RUO	1.0 mL (100 tests)	IQP-152F
CD235a FITC	NAM10-6G4	CD235 antibody conjugated with fluorochrome FITC	RUO	1.0 mL (100 tests)	IQP-145F

**ASR** Analyte Specific Reagent; analytical and performance characteristics are not established. The product complies with the ASR definitions of the U.S. Food & Drug Administration (FDA).

**RUO** Research Use Only