

# Mo-CD8/CD28

## 2 Color FCM Reagent: sc-3982



### BACKGROUND

Mouse CD8/CD28: sc-3982 is a direct immunofluorescence reagent formatted to identify and determine the percentage of activated suppressor/cytotoxic T lymphocytes in erythrocyte-lysed whole blood, based on cell-surface antigen expression. CD8 identifies suppressor/cytotoxic T lymphocytes (1,2) and binds class I MHC molecules, resulting in enhanced activation of resting T lymphocytes (3). CD28 is a ligand for the B7/BB1 antigen and is expressed on most T lymphocytes (4). CD28 expression increases during thymocyte maturation and in response to cell activation (4). CD8+CD28+ lymphocytes mediate alloantigen-specific cytotoxicity that is major histocompatibility complex (MHC) class I-restricted. CD8+CD28- lymphocytes mediate suppression of cell proliferation (4-6). T cells from both HIV+ and aged individuals show an increased number of CD8+ CD28- T cells (7).

Antigen Expression	Cell Type Identified
CD8+	Suppressor/Cytotoxic T Cells
CD8+ CD28+	Mediate Cytotoxicity
CD8+ CD28-	Suppress Cell Proliferation

### STORAGE

Store at 4° C. Do not freeze. Stable for one year from the date of shipment. Protect reagents from prolonged exposure to light.

### PRODUCT

Supplied in 1.0 ml of PBS containing 0.1% azide and 0.1% gelatin. Sufficient for 50 tests. This product has been titrated for optimal performance. Recommended use is 20 uL per test (1x10<sup>6</sup> cells). **For research use only. Not for use in diagnostic procedures.**

### INSTRUMENT

Mouse CD8/CD28: sc-3982 is recommended for use with either a single or dual laser Flow Cytometer fitted with appropriate acquisition and analysis software, such as the FACSCalibur™ Flow Cytometer fitted with CellQuest™ Software by Becton Dickinson.

The flow cytometer must be equipped with a 488 nm laser and must be capable of detecting light scatter (forward and side) and two-color fluorescence with emission detectable in two ranges: 515-545 nm, 562-607 nm.

Antigen	Clone	Isotype	Label*	Detection Range (nm)
CD8	53-6.7	rat IgG <sub>2a</sub>	FITC	515-545
CD28	37.51.1	Syrian Hamster IgG	PE	562-607

\*Fluorescent labels include FITC: Fluorescein isothiocyanate; PE: phycoerythrin

### ISOTYPE CONTROL

sc-3982 CON (rat IgG<sub>2a</sub> FITC/Syrian hamster IgG PE) is the isotype matched negative control for this system and is suitable for 50 tests.

### REFERENCES

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