



11175-A FLINTKOTE AVENUE, SAN DIEGO, CA 92121
TELEPHONE (858) 642-1988 • FAX (858) 642-1989
WWW.ATSBIO.COM • ATS@ATSBIO.COM

PREPARING FOR A CYTOTOXICITY ASSAY USING STREPTAVIDIN-ZAP

GOAL: To perform a Cytotoxicity Assay that will determine the ability of your targeting agent to
1) bind to an extracellular marker, 2) internalize, and 3) cause cell death.

HOW MUCH MATERIAL WILL YOU NEED?

Biotinylated Targeting Agent: 200 μ l of 1 μ M
(see “Concentration Calculation: Convert molarity to mg/ml and mg/ml to molarity”)

Streptavidin-ZAP: 200 μ l of 1 μ M

Control Conjugate: 150 μ l of 10 mM saporin

WHAT OTHER MATERIALS WILL YOU NEED?

Cells that express target receptor (**Note: do not use reducing agent in media**)

Microcentrifuge tubes

96-well plates with lids

Media (appropriate for your cells)

MTS, Promega #G1111

PMS, Promega #G1112

HOW LONG WILL THE ASSAY TAKE?

Five days. (see “Cytotoxicity Assay for Targeted Toxins *in vitro*”)

WHAT EQUIPMENT/SOFTWARE WILL I NEED TO INTERPRET THE RESULTS?

Vortexer

Incubator

Plate Reader

Softmax (Molecular Devices) or comparable software

Prism Software (Graphpad)

(see “Preparing and Interpreting Cytotoxicity Data”)