CUTANA™ 5% Digitonin

Catalog No	21-1004	**Pack Size**	1 mL
Lot No	24166001-81	**Applications**	CUT&RUN, CUT&Tag

DESCRIPTION

Digitonin is a nonionic detergent used in CUTANA™ CUT&RUN and CUT&Tag genomic mapping assays to permeabilize cells, facilitating antibody and enzyme access to chromatin. Digitonin also helps prevent clumping of Concanavalin A (ConA) magnetic beads and film formation on tubes, which minimizes sample loss. For this reason, Digitonin is recommended in assay buffers for both cell and nuclei samples. Refer to the appropriate kit manual or do-it-yourself (DIY) protocol for guidance on which assay buffers require Digitonin.

TECHNICAL INFORMATION

Storage	Stable for 2 years at -20°C from date of receipt.
Formulation	5% (w/v) digitonin in DMSO.
Instructions for Use	CUTANA™ 5% Digitonin can be used to prepare buffers for use in CUT&RUN or CUT&Tag. If using intact cells, the concentration of Digitonin should be optimized for efficient cell permeabilization. To avoid Digitonin precipitation and cell lysis, use the minimal concentration of Digitonin required for efficient cell permeabilization. EpiCypher has found 0.01% Digitonin to be the optimal concentration for most cell types. See www.epicypher.com/protocols for detailed protocols. Visit support.epicypher.com for guidance on optimizing digitonin concentration.

RECOMMENDED COMPANION PRODUCTS

Item	CAT
CUTANA™ CUT&RUN Kit	14-1048 / 14-1048-24
CUTANA™ CUT&RUN Library Prep Kit	14-1001 / 14-1002
CUTANA™ CUT&Tag Kit	14-1102 / 14-1103
CUTANA™ pAG-MNase	15-1016 / 15-1116
CUTANA™ pAG-Tn5	15-1017 / 15-1117
CUTANA™ ConA Beads	21-1401 / 21-1411
CUTANA™ Nuclei Extraction Buffer	21-1026
CUTANA™ Bead Activation Buffer	21-1001
CUTANA™ Stop Buffer	21-1003
CUTANA™ *E. coli* Spike-in DNA	18-1401
Magnetic Separation Rack (0.2 mL / 1.5 mL tubes)	10-0008 / 10-0012
8-strip 0.2 mL Tubes	10-0009

VALIDATION DATA

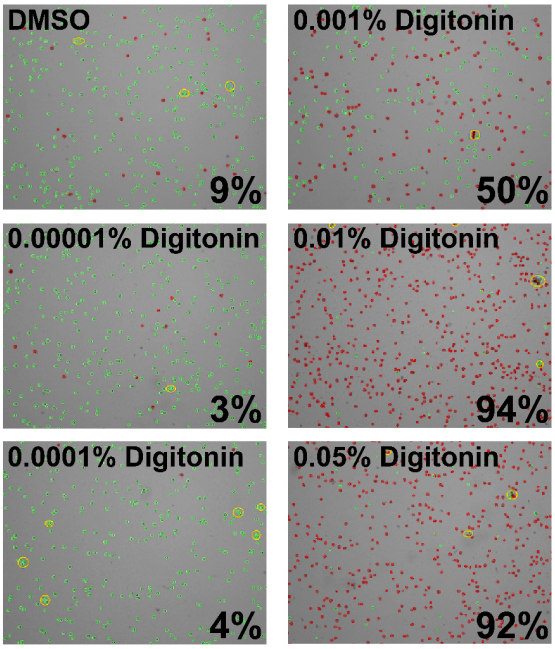

FIGURE 1 Cell permeabilization with Digitonin. The minimum amount of CUTANA™ 5% Digitonin needed to permeabilize K562 cells was determined by serial dilution of 5% Digitonin in Wash Buffer. Trypan Blue staining was used to evaluate permeability with an automated cell counter (live/dead cell viability analysis). Green cells (Trypan negative) are intact, whereas permeabilized/dead cells (Trypan positive) are red. Values (bottom right of each panel) indicate percent of dead/permeabilized cells.

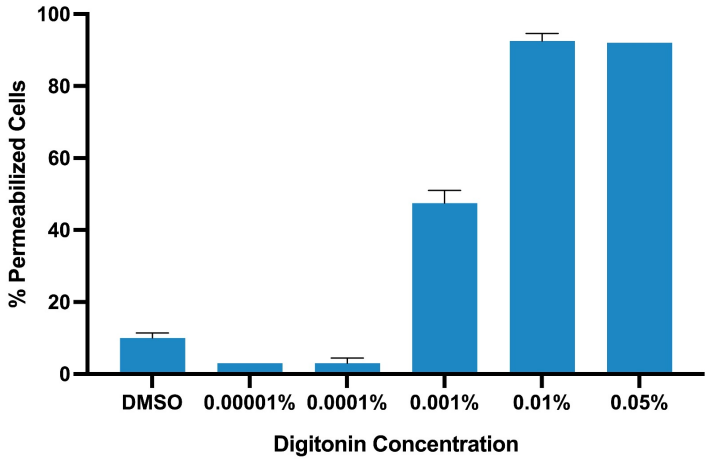

FIGURE 2 Quantification of cell permeabilization with Digitonin. Quantification of live/dead cells as shown in Figure 1. 0.01% was selected as the optimal concentration of Digitonin to efficiently permeabilize cells.