

# NATE™

InvivoGen

## Nucleic Acid Transfection Enhancer NEW

Boost your transfections with NATE™



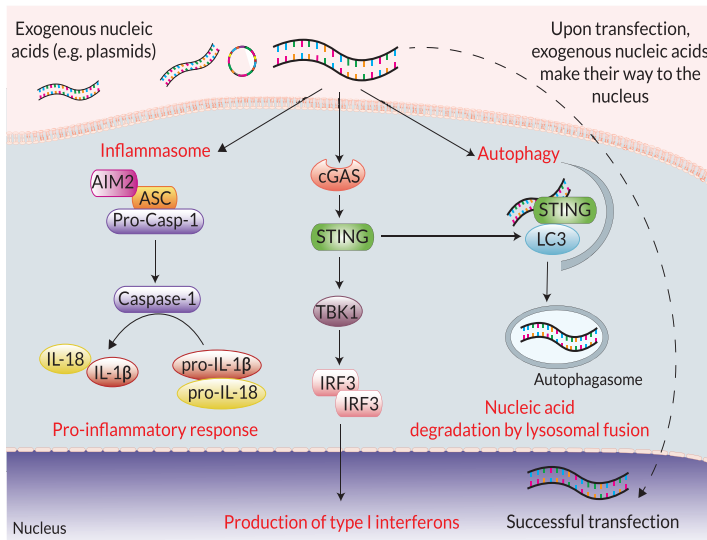
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InvivoGen now offers the NATE™ reagent, a nucleic acid transfection enhancer, to boost both transient and stable transfection efficiencies in hard-to-transfect cell lines such as monocytes and macrophages. As trusted experts in engineering THP-1 and RAW 264.7 reporter cell lines, do you want to know our little secret? The NATE™ reagent!

- **Flexible:** Can be used with all common transfection methods
- **Easy to use:** Simply add to the cells prior to transfection
- **Efficient:** Increases transfection yield in hard-to-transfect cells

### Obstacles to successful nucleic acid transfection

During eukaryotic cell transfection, exogenous nucleic acids are detected by cytosolic sensors such as cGAS/STING, AIM2 inflammasome, and LC3-mediated autophagy. The activation of these defensive signaling cascades frequently leads to low transfection yield, reduced cell viability, and inconsistent results especially in hard-to-transfect cells (e.g. immune cells).



### What is NATE™ ?

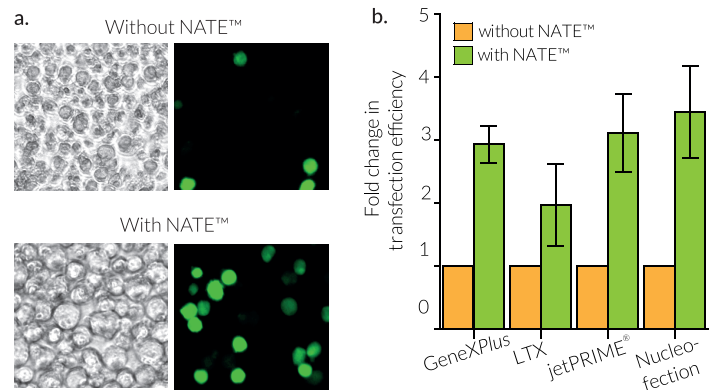
NATE™ is a *nucleic acid transfection enhancer* specifically designed by InvivoGen to improve transfections in immune cells. The NATE™ reagent inhibits a number of nucleic acid sensing pathways, thereby protecting exogenous DNA and facilitating its expression. Using the NATE™ reagent allows an increase in both DNA expression and rate of transfected cells.

#### Key features of NATE™ reagent:

- **Compatibility** with commonly used transfection reagents (e.g. GeneXPlus, Lipofectamine® LTX, and jetPRIME®) and physical methods (nucleofection)
- **Higher transfection yield**, even with large plasmids (>10 kB)
- **Increased cellular viability** with all tested transfection protocols

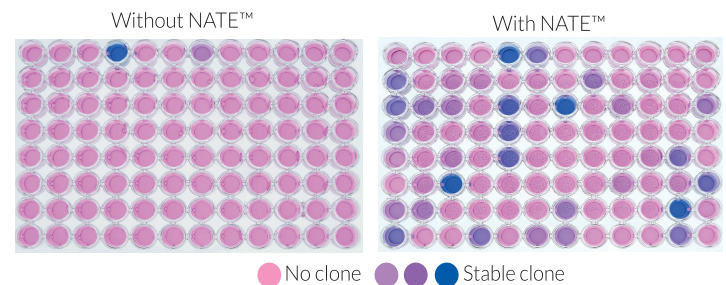
貨號	品名	包裝	限時優惠價
lyec-nate	NATE™	1ml (~100 reactions)	\$5,500

### Increased DNA expression in NATE™ treated cells



**NATE™ enhances transient DNA expression in human THP-1 monocytes:** Transfection of a ~3 kb GFP-expressing plasmid into THP-1 cells was performed using GeneXPlus without (a;top; b:yellow) or with (a:bottom; b:green) the NATE™ reagent. After 48 hours, cells were visualized by fluorescence microscopy (a), and transfection efficiency was measured using flow cytometry (b). Data are presented as a fold change normalized to the transfection efficiency without NATE™ reagent.

### Increased rate of stably transfected cells with NATE™

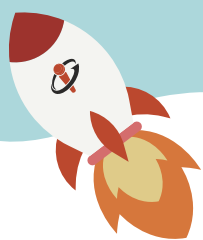


**NATE™ increases the number of stable SEAP-expressing clones in murine RAW 264.7 macrophages:** Transfection of a ~10 kb SEAP-expressing plasmid into RAW 264.7 cells was performed using Lipofectamine® LTX, without (left) or with (right) the NATE™ reagent. After 10 days in selection with Blasticidin, the number of stables clones expressing SEAP (blue wells) was readily visualized using QUANTI-Blue™ Solution detection reagent.

### Examples of transfections with NATE™

	THP-1	RAW 264.7
Plate size	12-well	24-well
Culture Volume	1ml	1ml
Seeding Cell Density	5 x 10 <sup>5</sup> c/w/ml	2 x 10 <sup>5</sup> c/w/ml
Transfection reagent used	GeneXPlus	Lipofectamine® LTX
Volume of 100x NATE™	10 µl	10 µl

*Note: Use of the NATE™ reagent will vary slightly depending on the cell-culture plate size (6-, 12-, 24-well plates) and the transfection method.*



細胞培養用抗生素

貨號	品名	包裝	限時優惠價
ant-nr-1	Normocin™	500 mg (10 x 1 ml)	\$5,600
ant-nr-2	Normocin™	1 g (1 x 20 ml)	\$8,400
ant-noc	Normocure™	100 mg (2 x 1 ml)	\$7,600
ant-pm-05	Primocin™	250 mg (5 x 1 ml)	\$4,100
ant-pm-1	Primocin™	500 mg (10 x 1 ml)	\$6,100
ant-pm-2	Primocin™	1 g (1 x 20 ml)	\$9,400
ant-pc	Plasmocure™	100 mg (1 ml)	\$9,600
ant-mpp	Plasmocin™ prophylactic	25 mg (10 x 1 ml)	\$4,500
ant-mpt	Plasmocin™ treatment	50 mg (2 x 1 ml)	\$6,600
ant-mpt-1	Plasmocin™ treatment	25 mg (1 x 1ml)	\$4,700
ant-fn-1	Fungin™	75 mg (5 x 1.5 ml vial)	\$5,100
ant-fn-2	Fungin™	200 mg (1 x 20 ml vial)	\$10,800

篩選用抗生素

貨號	品名	包裝	限時優惠價
ant-pr-1	Puromycin (solution)	100 mg (10 x 1 ml)	\$4,800
ant-pr-5	Puromycin (solution)	500 mg (50 x 1 ml)	\$20,400
ant-pr-5b	Puromycin (solution)	500 mg (1 x 50 ml)	\$14,200
ant-bl-05	Blasticidin (solution)	50 mg (5 x 1 ml)	\$5,800
ant-bl-1	Blasticidin (solution)	100 mg (10 x 1 ml)	\$8,300
ant-bl-10p	Blasticidin (powder)	1 g	\$52,400
ant-bl-5	Blasticidin (solution)	500 mg (50 x 1 ml)	\$36,700
ant-bl-5b	Blasticidin (solution)	500 mg (50 ml bottle)	\$31,000
ant-gn-1	G418 (solution)	1 g (10 x 1ml)	\$3,400
ant-gn-2	G418 (solution)	2 g (20 x 1 ml)	\$5,600
ant-gn-5	G418 (solution)	5 g (1 x 50 ml)	\$8,500
ant-hg-1	Hygromycin B Gold (solution)	1 g (10 x 1 ml)	\$4,800
ant-hg-2	Hygromycin B Gold (solution)	2 g (20 x 1 ml)	\$7,900
ant-hg-5	Hygromycin B Gold (solution)	5 g (1 x 50 ml)	\$14,700
ant-zn-05	Zeocin™ (solution)	500 mg (5 x 1ml)	\$5,400
ant-zn-1	Zeocin™ (solution)	1g (10 x 1 ml)	\$7,000
ant-zn-1p	Zeocin™ (powder)	1 g (powder)	\$6,400
ant-zn-5	Zeocin™ (solution)	5g (50 x 1 ml)	\$29,000
ant-zn-5b	Zeocin™ (solution)	5 g (50 ml bottle)	\$24,500
ant-zn-5p	Zeocin™ (powder)	5 g (powder)	\$23,400
ant-ph-1	Phleomycin (solution)	100 mg (5 x 1 ml)	\$5,100
ant-ph-2p	Phleomycin (powder)	250 mg	\$9,600
ant-ph-5	Phleomycin (solution)	500 mg (25 x 1 ml)	\$18,900
ant-ph-5p	Phleomycin (powder)	500 mg	\$16,600
hb-csm	HEK-Blue™ CLR Selection	10 x 1 ml	\$4,700
hb-sel	HEK-Blue™ Selection	10 x 1ml	\$4,700