

**Enterotoxigenic *Escherichia coli* Expression Clone Set, Recombinant in *Escherichia coli*, Plate 13**

**Catalog No. NR-19802**

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**Contributor:**

Pathogen Functional Genomics Resource Center at the J. Craig Venter Institute

**Manufacturer:**

BEI Resources

**Product Description:**

The Enterotoxigenic *Escherichia coli* (ETEC) expression clone set consists of 14 plates which contain 917 sequence validated clones from *Escherichia coli* (*E. coli*) strains H10407, E24377A and B7A cloned in *E. coli* DH10B-T1 cells. Each open reading frame was constructed in vector [pMCSG7](#) (a pET21 derivative; for routine HTP purification). The sequence was validated by full length sequencing of each clone with greater than 1X coverage and a mutation rate of less than 0.2%. Note: Due to viability issues, all clones may not be available. Please refer to Table 1 for more information on unavailable clones.

**Material Provided:**

Each inoculated well of the 96-well plate contains approximately 60 µL of *E. coli* culture (strain DH10B-T1) in Luria Bertani (LB) Broth containing 100 µg/mL ampicillin supplemented with 15% glycerol.

**Note:** Production in the 96-well format has increased risk of cross-contamination between adjacent wells. Individual clones should be purified (e.g. single colony isolation and purification using good microbiological practices) and sequence-verified prior to use. BEI Resources cannot confirm or validate any clone not identified on the plate information table.

**Packaging/Storage:**

NR-19802 was packaged aseptically in a 96-well plate. The product is provided frozen and should be stored at -80°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

**Growth Conditions:**

**Media:**

LB Broth or Agar containing 100 µg/mL ampicillin.

**Incubation:**

Temperature: *E. coli*, strain DH10B-T1 clones should be grown at 37°C.

Atmosphere: Aerobic

**Propagation:**

1. Scrape top of frozen well with a pipette tip and streak onto agar plate.
2. Incubate the plates at 37°C for 18 to 24 hours.

**Citation:**

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Enterotoxigenic *Escherichia coli* Expression Clone Set, Recombinant in *Escherichia coli*, Plate 13, NR-19802.”

**Biosafety Level: 2**

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. [Biosafety in Microbiological and Biomedical Laboratories](#). 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see [www.cdc.gov/biosafety/publications/bmbl5/index.htm](http://www.cdc.gov/biosafety/publications/bmbl5/index.htm).

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**References:**

1. Stols, L., et al. "A New Vector for High-Throughput, Ligation-Independent Cloning Encoding a Tobacco Etch Virus Protease Cleavage Site." *Protein Expr. Purif.* 25 (2002): 8-15. PubMed: 12071693.

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**Table 1: Enterotoxigenic *E. coli* Expression Clone Set, Recombinant in *Escherichia coli*, Plate 13 (EEXAM)**

Clone	Well Position	Locus ID	Description (Gene name)	ORF Length	Accession Number	Average Depth of Coverage
D000024759	A02	EcB7A_2521	hypothetical protein EcB7A_2521	170	ZP_03031456	2
D000024761	A03	EcB7A_3485	endolysin	443	ZP_03030498	2
D000024763	A04	EcB7A_5260	hypothetical protein EcB7A_5260	170	ZP_03031430	2
D000024767	A06	b7a_C127_g1	putative transposase	260	CBJ01632	2
D000024769	A07	b7a_C12_g21	hypothetical protein	467	Not Annotated	2
D000024771	A08	EcB7A_5176	hypothetical protein EcB7A_5176	260	ZP_03030884	2
D000024773	A09	EcB7A_5357	protein stbB	473	ZP_03031338	2
D000024778	A11	b7a_C114_g3	conserved hypothetical protein	479	Not Annotated	2
D000024782	B01	EcB7A_2545	conserved hypothetical protein	482	ZP_03029994	2
D000024783	B02	b7a_C155_g6	hypothetical protein	305	Not Annotated	2
D000024785	B03	EcB7A_1649	PilM	488	ZP_03028091	2
D000024793	B07	b7a_C267_g1	putative pinE invertase/site-specific DNA recombinase [ <i>Escherichia coli</i> ETEC H10407]	662	CBI99815	2
D000024796	B08	b7a_C75_g11	hypothetical protein	353	Not Annotated	2
D000024797	B09	EcB7A_3472	hypothetical protein EcB7A_3472	713	ZP_03030157	2
D000024800	B10	b7a_C98_g1	putative transposase TnpA protein [ <i>Escherichia coli</i> ETEC H10407]	371	CBI99738	3.216802168
D000024801	B11	b7a_C53_g5	putative phage protein [ <i>Escherichia coli</i> ETEC H10407]	719	CBJ00752	2
D000024803	B12	EcB7A_2390	glycosyl hydrolase [ <i>Escherichia coli</i> E24377A]	377	YP_001463450	3.217506631
D000024807	C02	b7a_C6_g8	hypothetical protein	386	Not Annotated	2
D000024809	C03	EcB7A_4053	conserved hypothetical protein	758	ZP_03030453	2

Clone	Well Position	Locus ID	Description (Gene name)	ORF Length	Accession Number	Average Depth of Coverage
D000024811	C04	b7a_C6_g14	hypothetical protein	389	Not Annotated	2
D000024814	C05	EcB7A_3479	baseplate assembly protein J	947	ZP_03030499	1.488912355
D000024815	C06	b7a_C12_g38	hypothetical protein	404	Not Annotated	1.440594059
D000024817	C07	EcB7A_0626	baseplate assembly protein GpJ	959	ZP_03031402	1.689259645
D000024820	C08	b7a_C34_g10	hypothetical protein	410	Not Annotated	2
D000024821	C09	EcB7A_5246	conserved hypothetical protein	1121	ZP_03031253	4.801962533
D000024823	C10	b7a_C67_g6	hypothetical protein	425	Not Annotated	2
D000024829	D01	EcB7A_4240	hypothetical protein	1466	Not Annotated	3.660300136
D000024831	D02	EcB7A_4632	conserved hypothetical protein	428	ZP_03030837	2
D000024835	D04	b7a_C2_g15	hypothetical protein	443	Not Annotated	2
D000024839	D06	EcE24377A_0671	hypothetical protein EcE24377A_0671	224	YP_001461813	2
D000024841	D07	e24_Ch_g249	conserved hypothetical protein	464	ABV21012	2.574514039
D000024843	D08	e24_P73_g43	hypothetical protein	251	Not Annotated	2
D000024845	D09	EcE24377A_C0017	hypothetical protein	479	Not Annotated	2
D000024847	D10	e24_P74_g36	hypothetical protein	287	Not Annotated	2.61971831
D000024849	D11	e24_Ch_g188	hypothetical protein	599	Not Annotated	2
D000024855	E02	e24_P35_g22	hypothetical protein	308	Not Annotated	2
D000024857	E03	EcE24377A_0675	hypothetical protein EcE24377A_0675	605	YP_001461817	1.995041322
D000024859	E04	e24_P80_g33	hypothetical protein	308	Not Annotated	2
D000024862	E05	e24_Ch_g115	conserved hypothetical protein	632	ABV20431	2
D000024863	E06	e24_P74_g37	hypothetical protein	347	Not Annotated	2
D000024865	E07	EcE24377A_F0035	hypothetical protein	677	Not Annotated	2
D000024867	E08	e24_P73_g80	hypothetical protein	350	Not Annotated	1.865714286
D000024869	E09	EcE24377A_0673	hypothetical protein EcE24377A_0673	758	YP_001461815	2
D000024871	E10	e24_P74_g55	hypothetical protein	359	Not Annotated	1.708609272
D000024873	E11	EcE24377A_0299	hypothetical protein EcE24377A_0299	761	YP_001461452	2
D000024875	E12	e24_Ch_g108	phage regulatory protein	368	ABV20548	2

Clone	Well Position	Locus ID	Description (Gene name)	ORF Length	Accession Number	Average Depth of Coverage
D000024879	F02	e24_P74_g34	hypothetical protein	377	Not Annotated	1.840848806
D000024881	F03	EcE24377A_F0072	hypothetical protein	824	Not Annotated	1.996359223
D000024883	F04	e24_P35_g23	hypothetical protein	401	Not Annotated	1.643391521
D000024885	F05	EcE24377A_F0046	polysaccharide deacetylase family protein	872	ABV20269	1.969036697
D000024887	F06	EcE24377A_E0037	hypothetical protein	401	Not Annotated	2
D000024889	F07	EcE24377A_2216	baseplate assembly protein J	941	YP_001463284	3.060573858
D000024891	F08	e24_P80_g12	hypothetical protein	404	Not Annotated	2
D000024894	F09	EcE24377A_F0009	hypothetical protein	995	Not Annotated	1.715577889
D000024896	F10	e24_P74_g26	hypothetical protein	425	Not Annotated	2
D000024898	F11	EcE24377A_2927	hypothetical protein EcE24377A_2927	1043	YP_001463961	1.448705657
D000024899	F12	EcE24377A_1278	hypothetical protein EcE24377A_1278	428	YP_001462385	2
D000024902	G01	e24_P80_g2	hypothetical protein	1064	Not Annotated	2.675213675
D000024905	G03	EcE24377A_3135	ImpA-related N-terminal domain-containing protein	1427	YP_001464150	4.156271899
D000024907	G04	e24_Ch_g151	hypothetical protein EcE24377A_1254	440	Not Annotated	1.652272727
D000024909	G05	H10407_SANG_p948.1000	hypothetical protein	194	Not Annotated	2
D000024911	G06	H10407_SANG_CHR OM0216	putative copper/silver-binding protein SilE precursor	599	CBI99716	2
D000024913	G07	H10407_SANG_p948.0540	hypothetical protein	233	Not Annotated	2
D000024916	G08	H10407_SANG_CHR OM4314	hypothetical phage protein	599	CBJ03820	1.949916528
D000024917	G09	H10407_SANG_p948.1040	hypothetical protein	242	Not Annotated	3.272727273
D000024920	G10	H10407_SANG_CHR OM0311	putative pinE invertase/site-specific DNA recombinase	605	CBI99815	2.828150573
D000024922	G11	H10407_SANG_CHR OM1247	dna-invertase	245	CBJ00751	1.971428571
D000024923	G12	H10407_SANG_CHR OM0676	putative exported protein	605	CBJ00183	2
D000024925	H01	H10407_SANG_CHR OM2721	putative DNA-invertase from lambdoid prophage e14	266	CBJ02227	2

Clone	Well Position	Locus ID	Description (Gene name)	ORF Length	Accession Number	Average Depth of Coverage
D000024927	H02	H10407_SANG_p948.0850	hypothetical protein	617	Not Annotated	2.539708266
D000024929	H03	h104_P666_g13	hypothetical protein	275	Not Annotated	2.483636364
D000024931	H04	H10407_SANG_CHR OM1248	hypothetical protein	635	Not Annotated	2
D000024933	H05	H10407_SANG_p666.0100	hypothetical protein	284	Not Annotated	2
D000024937	H07	H10407_SANG_CHR OM2846	putative DNA-invertase from prophage	293	CBJ02350	2
D000024939	H08	H10407_SANG_CHR OM3045_1_627	type III secretion system protein	680	CBJ02547	2
D000024941	H09	H10407_SANG_CHR OM1978	conserved hypothetical protein	296	CBJ01480	2
D000024943	H10	H10407_SANG_CHR OM3214_103_735	conserved hypothetical protein	689	CBJ02712	1.928882438
D000024945	H11	h104_P666_g14	hypothetical protein	311	Not Annotated	1.774919614