

**Enterotoxigenic *Escherichia coli*
Expression Clone Set, Recombinant in
Escherichia coli, Plate 4****Catalog No. NR-19793**

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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 approximately 900 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, using ligation independent cloning, in vector [pMCSG7](#) (a pET21 derivative that contains an N-terminal 6xHis tag; for routine HTP purification). The sequence was validated by full length sequencing of each clone (using 5' and 3' primers; TACTTCCAATCCAATGCG and TTATCCCACTCCAATG, respectively) with greater than 1X coverage and a mutation rate of less than 0.2%. Please refer to Table 1 for more information on the available 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-19793 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 4, NR-19793."

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/bmb15/index.htm.

Disclaimers:

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Ligation-Independent Cloning Encoding a Tobacco Etch Virus Protease Cleavage Site." *Protein Expr. Purif.* 25 (2002): 8-15. PubMed: 12071693.

References:

1. Stols, L., et al. "A New Vector for High-Throughput,

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Table 1: Enterotoxigenic *E. coli* Expression Clone Set, Recombinant in *Escherichia coli*, Plate 4 (EEXAD)

Clone	Well	Locus ID	Description	ORF Length	Protein Accession Number	Average Depth of Coverage
D000023071	A04	EcB7A_1218_1_324	copper amine oxidase	377	ZP_03026875	2
D000023075	A06	b7a_C75_g20_1_327	conserved hypothetical protein	383	ZP_03026845	2
D000023080	A08	b7a_C12_g3_1_330	D-lactate dehydrogenase	383	ZP_03026912	2
D000023083	A10	b7a_C6_g7_1_330	D-lactate dehydrogenase	386	ZP_03026912	2
D000023088	A12	b7a_C12_g37_1_333	pyruvate-flavodoxin oxidoreductase	386	ZP_03026992	2
D000023091	B02	b7a_C6_g13_1_333	pyruvate-flavodoxin oxidoreductase	389	ZP_03026992	2
D000023093	B03	b7a_C140_g1_1_336	universal stress protein F	392	ZP_03027029	2
D000023097	B05	EcE24377A_0549_1_90	UDP-N-acetylmuramoyl-L-alanyl-D-glutamate synthetase	143	YP_001461258	2
D000023100	B06	e24_Ch_g277_1_366	cyanate transporter	419	YP_001461518	2
D000023101	B07	EcE24377A_1495_1_96	cell division protein	149	YP_001461264	2
D000023103	B08	e24_P80_g23_1_369	lac repressor	422	YP_001461521	2.6019
D000023105	B09	EcE24377A_3163_1_96	cell division protein	149	YP_001461264	2
D000023107	B10	e24_Ch_g209_1_375	acetaldehyde dehydrogenase	428	YP_001461527	2
D000023109	B11	EcE24377A_2812_1_114	acriflavine resistance protein D	167	ZP_03029459	3.2108
D000023113	C01	EcE24377A_1316_1_117	hydrolase, NUDIX family	170	ZP_03029433	2
D000023115	C02	EcE24377A_1226_1_375	acetaldehyde dehydrogenase	428	YP_001461527	2
D000023117	C03	EcE24377A_3459_1_126	glucose dehydrogenase	179	YP_001461292	2
D000023120	C04	e24_P73_g51_1_384	acyltransferase	437	YP_001461536	2
D000023121	C05	e24_P74_g51_88_216	membrane-bound lytic murein transglycosylase D	185	YP_001461376	2
D000023123	C06	EcE24377A_2919_1_384	acyltransferase	437	YP_001461536	2
D000023126	C07	EcE24377A_3711_1_132	polysaccharide deacetylase	185	YP_001461298	2
D000023127	C08	EcE24377A_1276_1_390	NA	443	NA	2
D000023129	C09	EcE24377A_1483_1_141	hypothetical protein EcE24377A_0141	194	YP_001461307	2
D000023131	C10	EcE24377A_3170_1_390	hypothetical protein	443	NA	2
D000023134	C11	EcE24377A_1115_1_147	poly(A) polymerase	200	YP_001461313	2.6735
D000023135	C12	e24_P35_g12_1_399	hypothetical protein EcE24377A_0399	452	YP_001461550	2
D000023137	D01	EcE24377A_3646_1_153	penicillin-binding protein 1b	206	YP_001461319	2
D000023140	D02	EcE24377A_3357_1_399	hypothetical protein EcE24377A_0399	452	YP_001461550	2
D000023141	D03	EcE24377A_4848_1_159	glutamate-1-semialdehyde aminotransferase	212	YP_001461325	2
D000023144	D04	e24_P73_g83_1_405	hypothetical protein EcE24377A_0405	458	YP_001461556	2
D000023145	D05	EcE24377A_4974_1_159	glutamate-1-semialdehyde aminotransferase	212	YP_001461325	2

Clone	Well	Locus ID	Description	ORF Length	Protein Accession Number	Average Depth of Coverage
D000023147	D06	EcE24377A_4197_1_405	hypothetical protein EcE24377A_0405	458	YP_001461556	2
D000023149	D07	EcE24377A_2643_1_168	hypothetical protein EcE24377A_0168	221	YP_001461334	2
D000023153	D09	EcE24377A_F0028_1_168	hypothetical protein EcE24377A_0168	221	YP_001461334	2
D000023155	D10	e24_Ch_g142_1_414	hypothetical protein	467	YP_001461565	2
D000023157	D11	EcE24377A_1913_1_174	elongation factor Ts	227	YP_001461339	2
D000023159	D12	e24_Ch_g22_1_417	hypothetical protein	470	YP_001461568	2
D000023161	E01	EcE24377A_3753_1_174	elongation factor Ts	227	YP_001461339	2
D000023163	E02	e24_P6_g8_1_420	recombination associated protein	473	YP_001461571	2
D000023165	E03	EcE24377A_1458_1_177	1-deoxy-D-xylulose 5-phosphate reductoisomerase	230	YP_001461342	2
D000023167	E04	e24_Ch_g90_1_423	MFS transport protein	476	YP_001461574	2
D000023169	E05	e24_P80_g26_1_186	lipid-A-disaccharide synthase	239	YP_001461351	2
D000023171	E06	EcE24377A_3258_1_429	hypothetical protein EcE24377A_0429	482	YP_001461580	2
D000023173	E07	EcE24377A_2920_1_186	lipid-A-disaccharide synthase	239	YP_001461351	2
D000023175	E08	e24_Ch_g436_1_435	S-adenosylmethionine--tRNA ribosyltransferase-isomerase	488	YP_001461586	2
D000023175	E08	e24_Ch_g436_1_435	S-adenosylmethionine--tRNA ribosyltransferase-isomerase	488	YP_001461586	2
D000023177	E09	EcE24377A_4922_1_192	tRNA(Ile)-lysidine synthetase	245	YP_001461357	2
D000023179	E10	EcE24377A_D0052_1_435	S-adenosylmethionine--tRNA ribosyltransferase-isomerase	488	YP_001461586	2
D000023181	E11	e24_Ch_g301_235_426	hypothetical protein	248	YP_001461577	2
D000023183	E12	EcE24377A_2914_1_438	preprotein translocase subunit	491	YP_001461589	2
D000023185	F01	EcE24377A_1449_1_195	hypothetical protein EcE24377A_0195	248	YP_001461360	2
D000023187	F02	e24_P35_g6_1_447	transcription antitermination protein	500	YP_001461598	3.152
D000023189	F03	e24_Ch_g193_1_198	IS621, transposase	251	YP_001461363	2
D000023191	F04	EcE24377A_1244_1_459	major facilitator transporter	512	YP_001461610	2
D000023193	F05	e24_Ch_g317_1_198	IS621, transposase	251	YP_001461363	2
D000023195	F06	e24_P73_g69_1_462	hypothetical protein EcE24377A_0462	515	YP_001461613	2
D000023197	F07	e24_Ch_g606_1_198	IS621, transposase	251	YP_001461363	2
D000023199	F08	e24_Ch_g468_1_477	peptidyl-prolyl cis-trans isomerase	530	YP_001461628	2
D000023201	F09	e24_Ch_g80_1_198	IS621, transposase	251	YP_001461363	2
D000023203	F10	e24_P80_g51_1_486	nitrogen regulatory protein P-II 2	539	YP_001461637	2
D000023208	F12	EcE24377A_2630_1_501	hypothetical protein EcE24377A_0501	554	YP_001461652	2
D000023209	G01	e24_P73_g34_1_198	IS621, transposase	251	YP_001461363	2
D000023211	G02	e24_Ch_g492_1_513	adenylate kinase	566	YP_001461663	2
D000023213	G03	e24_P73_g42_1_198	IS621, transposase	251	YP_001461363	2
D000023215	G04	EcE24377A_2395_1_516	inosine-guanosine kinase	569	YP_001461666	2
D000023217	G05	e24_Ch_g273_1_201	prolyl-tRNA synthetase	254	YP_001461365	2
D000023219	G06	e24_Ch_g212_1_519	bifunctional UDP-sugar hydrolase/5'-nucleotidase periplasmic	572	YP_001461669	2
D000023221	G07	e24_Ch_g474_1_201	prolyl-tRNA synthetase	254	YP_001461365	2

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D000023223	G08	e24_P73_g6_1_519	bifunctional UDP-sugar hydrolase/5'-nucleotidase periplasmic	572	YP_001461669	2
D000023225	G09	e24_Ch_g497_1_201	prolyl-tRNA synthetase	254	YP_001461365	2
D000023229	G11	e24_Ch_g668_1_201	prolyl-tRNA synthetase	254	YP_001461365	2
D000023234	H01	e24_P5_g2_1_201	prolyl-tRNA synthetase	254	YP_001461365	2
D000023236	H02	EcE24377A_2219_1_534	ABC transporter ATP-binding protein	587	YP_001461684	1.7513
D000023237	H03	e24_P6_g12_1_201	prolyl-tRNA synthetase	254	YP_001461365	2
D000023241	H05	e24_Ch_g254_1_204	DL-methionine transporter substrate-binding subunit	257	YP_001461368	2
D000023245	H07	e24_Ch_g453_1_207	D,D-heptose 1,7-bisphosphate phosphatase	260	YP_001461371	2
D000023248	H08	EcE24377A_3672_1_543	DNA-binding transcriptional repressor AIIR	596	YP_001461692	2
D000023250	H09	e24_Ch_g496_1_207	D,D-heptose 1,7-bisphosphate phosphatase	260	YP_001461371	2
D000023252	H10	e24_Ch_g325_1_546	2-hydroxy-3-oxopropionate reductase	599	YP_001461695	2.2237
D000023254	H11	e24_Ch_g524_1_207	D,D-heptose 1,7-bisphosphate phosphatase	260	YP_001461371	NA

NA-Not Available