

Enterotoxigenic *Escherichia coli* Expression Clone Set, Recombinant in *Escherichia coli*, Plate 9

Catalog No. NR-19798

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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-19798 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 9, NR-19798."

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.

Disclaimers:

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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 9 (EEXAI)

Clone	Well Position	Locus ID	Description (Gene name)	ORF Length	Accession Number	Average Depth of Coverage
D000024007	A02	H10407_SANG_CHR OM2250_1_279	putative exported protein	332	CBJ01754	2
D000024009	A03	H10407_SANG_CHR OM0673_1_975	conserved hypothetical protein	1028	CBJ00180	1.5856
D000024011	A04	H10407_SANG_CHR OM3792b_1_279	putative lipase 1 precursor (triacylglycerol lipase), pseudogene	332	PSEUDO:CBJ03294	2
D000024013	A05	H10407_SANG_CHR OM4621_1_978	putative prophage protein	1031	CBJ04130	2.9699
D000024015	A06	H10407_SANG_CHR OM3272_1_285	conserved hypothetical protein	338	CBJ02773	2
D000024018	A07	H10407_SANG_CHR OM3372_1_984	putative glutathione S-transferase	1037	CBJ02872	1.5796
D000024019	A08	H10407_SANG_CHR OM1136_1_291	negative regulator of flagellin synthesis (anti-sigma factor)	344	CBJ00644	2
D000024022	A09	H10407_SANG_CHR OM0264_67_1053	outer membrane pore protein E	1043	CBI99764	1.6222
D000024023	A10	H10407_SANG_CHR OM3386_1_294	tdc operon transcriptional activator	347	CBJ02886	2
D000024027	A12	h104_Ch_g1026_1_300	KpLE2 phage-like element; predicted protein	353	CBJ04122	2
D000024029	B01	H10407_SANG_CHR OM0330_1_990	putative DNA transfer protein	1043	CBI99834	1.4708
D000024032	B02	h104_Ch_g520_1_300	putative transmembrane anchored protein	353	CBJ02128	2
D000024035	B04	H10407_SANG_CHR OM1286_610_909	haemolysin/cytolysin A	356	CBJ00789	2
D000024040	B06	H10407_SANG_CHR OM1056_1_303	predicted transmembrane protein	356	CBJ00565	2
D000024042	B07	H10407_SANG_CHR OM2372_79_1074	glycerophosphoryl diester phosphodiesterase	1052	CBJ01876	1.5504
D000024043	B08	H10407_SANG_CHR OM2481_1_306	lipoprotein	359	CBJ01985	2
D000024046	B09	H10407_SANG_CHR OM2737_982_1986	putative lytic transglycosylase, catalytic	1061	CBJ02242	1.6098
D000024047	B10	H10407_SANG_CHR OM4518_1_306	host factor-I protein (HF-I)	359	CBJ04027	2

Clone	Well Position	Locus ID	Description (Gene name)	ORF Length	Accession Number	Average Depth of Coverage
D000024050	B11	h104_Ch_g978_1_101_1	conserved hypothetical protein	1064	CBJ03965	4.657
D000024051	B12	H10407_SANG_CHR OM0328_1_309	putative prophage protein	362	CBI99830	2
D000024053	C01	H10407_SANG_CHR OM2673_1_1011	putative regulatory protein	1064	CBJ02179	1.4981
D000024055	C02	H10407_SANG_CHR OM2646_1_312	hypothetical phage protein	365	CBJ02151	2
D000024059	C04	h104_Ch_g639_1_315	putative lipoprotein	368	CBJ02668	2
D000024062	C05	H10407_SANG_CHR OM3903_661_1671	predicted hydrolase	1067	CBJ03410	4.7657
D000024065	C07	H10407_SANG_CHR OM1272_1_1014	putative AidA-I adhesin-like protein, pseudogene	1067	PSEUDO:CBJ00776	1.4864
D000024068	C08	H10407_SANG_CHR OM1282_82_399	putative exported protein	374	CBJ00785	2
D000024069	C09	H10407_SANG_CHR OM0997_70_1086	outer membrane protein F	1073	CBJ00505	3.8639
D000024071	C10	H10407_SANG_CHR OM4332_1_318	hypothetical phage protein	371	CBJ03838	2
D000024073	C11	H10407_SANG_CHR OM2892_67_1083	membrane-bound lytic transglycosylase B	1073	CBJ02392	1.3868
D000024075	C12	H10407_SANG_CHR OM1934_1_321	conserved hypothetical protein	374	CBJ01439	2
D000024078	D01	H10407_SANG_CHR OM0806_73_1095	outer membrane porin protein	1079	CBJ00316	1.5273
D000024079	D02	h104_Ch_g804_1_324	integrase	377	CBJ03406	2
D000024081	D03	H10407_SANG_CHR OM2349_67_1101	outer membrane protein C	1091	CBJ01853	1.4308
D000024083	D04	H10407_SANG_CHR OM2520_67_390	conserved hypothetical protein	380	CBJ02024	2
D000024085	D05	H10407_SANG_CHR OM2944_1_1035	Not Available	1088	Not Annotated	-
D000024090	D07	H10407_SANG_CHR OM1649_226_1263	putative exported protein	1094	CBJ01152	1.4369
D000024091	D08	H10407_SANG_CHR OM0347_1_327	conserved hypothetical protein	380	CBI99852	2
D000024093	D09	H10407_SANG_CHR OM3275_1_1038	putative aldo/keto reductase	1091	CBJ02775	1.4519
D000024095	D10	H10407_SANG_CHR OM3239_82_408	type II secretion system lipoprotein	383	CBJ02739	2
D000024098	D11	H10407_SANG_CHR OM2066_67_1113	outer membrane protein	1103	CBJ01569	4.6872
D000024103	E02	H10407_SANG_CHR OM1224_1_330	head decoration protein (major capsid protein)	383	CBJ04213	3.1958
D000024106	E03	H10407_SANG_CHR OM2487_106_1161	EmrKY-ToIC multidrug resistance efflux pump, membrane fusion protein component	1112	CBJ01991	1.3534

Clone	Well Position	Locus ID	Description (Gene name)	ORF Length	Accession Number	Average Depth of Coverage
D000024107	E04	H10407_SANG_CHR OM2223_1_330	conserved hypothetical protein	383	CBJ01726	2
D000024111	E06	H10407_SANG_CHR OM4707_1_330	putative head-DNA stabilization phage protein	383	CBJ00729	3.2063
D000024113	E07	H10407_SANG_CHR OM2734_1_1062	putative phage related protein	1115	CBJ02239	1.4942
D000024115	E08	h104_Ch_g641_1_333	LacI-family transcriptional regulator	386	CBJ02686	2
D000024118	E09	H10407_SANG_CHR OM3319_1_1062	conserved hypothetical protein	1115	CBJ02819	1.5381
D000024119	E10	h104_Ch_g820_1_333	putative radC-like protein	386	CBJ03451	2
D000024122	E11	H10407_SANG_CHR OM1052_73_1137	phosphotyrosine-protein phosphatase	1121	CBJ00560	1.4451
D000024123	E12	H10407_SANG_CHR OM0277_1_336	hypothetical phage protein	389	CBJ03823	3.1979
D000024126	F01	H10407_SANG_CHR OM1451_67_1131	outer membrane protein N (porin)	1121	CBJ00954	1.4362
D000024127	F02	H10407_SANG_CHR OM4318_1_336	e14 prophage; predicted DNA-binding transcriptional regulator	389	CBI99776	3.1414
D000024129	F03	H10407_SANG_CHR OM2205_73_1137	putative polysaccharide export protein	1121	CBJ01708	1.4567
D000024131	F04	h104_Ch_g652_1_342	Not Available	395	Not Annotated	2
D000024133	F05	H10407_SANG_CHR OM4168_1_1068	predicted endo-1,4-beta-glucanase	1121	CBJ03673	3.8519
D000024136	F06	H10407_SANG_CHR OM0152_1_342	conserved hypothetical protein	395	CBI99653	2
D000024138	F07	H10407_SANG_CHR OM3153_1_1077	Not Available	1130	Not Annotated	2
D000024139	F08	H10407_SANG_CHR OM2318_1_342	conserved hypothetical protein	395	CBJ01822	2
D000024141	F09	H10407_SANG_CHR OM0882_502_1581	putative membrane protein	1136	CBJ00391	1.4076
D000024143	F10	H10407_SANG_CHR OM3915_1_345	putative transmembrane protein	398	CBJ03422	2
D000024146	F11	H10407_SANG_CHR OM2504_1_1083	aminopeptidase	1136	CBJ02008	4.6056
D000024147	F12	H10407_SANG_CHR OM1974_1_348	conserved hypothetical protein	401	CBJ01477	2
D000024151	G02	h104_Ch_g912_1_351	50S ribosomal subunit protein L7/L12	404	CBJ03750	2
D000024153	G03	H10407_SANG_CHR OM0661_1_1086	rare lipoprotein A	1139	CBJ00168	1.4276
D000024155	G04	H10407_SANG_CHR OM2729_1_351	putative phage related protein	404	CBJ02234	2

Clone	Well Position	Locus ID	Description (Gene name)	ORF Length	Accession Number	Average Depth of Coverage
D000024157	G05	H10407_SANG_CHR OM3412_1_1089	predicted fimbrial-like adhesin prot	1142	CBJ02913	1.3862
D000024159	G06	H10407_SANG_CHR OM4491_1_351	putative lipoprotein	404	CBJ04000	2
D000024161	G07	H10407_SANG_CHR OM3003_1_1095	membrane-bound lytic murein transglycosylase A	1148	CBJ02505	4.5218
D000024163	G08	h104_Ch_g945_1_354	Not Available	407	Not Annotated	2
D000024165	G09	H10407_SANG_CHR OM3777_1_1104	cellulose synthase operon protein C (TPR-repeat-containing protein)	1157	CBJ03277	1.3319
D000024167	G10	h104_P948_g14_1_357	Not Available	410	Not Annotated	2
D000024169	G11	H10407_SANG_CHR OM4622_1_1104	putative exported protein	1157	CBJ04131	1.2904
D000024171	G12	h104_P948_g8_1_357	Not Available	410	Not Annotated	2
D000024174	H01	H10407_SANG_CHR OM2669_70_1176	putative dehydrogenase	1163	CBJ02175	1.2846
D000024175	H02	H10407_SANG_CHR OM2047_106_462	flagellar protein FliL	413	CBJ01550	2
D000024177	H03	H10407_SANG_CHR OM4612_1_1113	putative sulfatase	1166	CBJ04121	3.7161
D000024179	H04	h104_Ch_g1065_1_360	Phage DNA packaging protein	413	CBJ04209	2
D000024182	H05	H10407_SANG_CHR OM2203_163_1278	tyrosine-protein kinase	1172	CBJ01706	1.4283
D000024184	H06	H10407_SANG_CHR OM2625_1_363	hypothetical phage protein	416	CBJ02131	2
D000024186	H07	H10407_SANG_CHR OM0515_70_1191	acriflavin resistance protein A precursor	1178	CBJ00019	1.4329
D000024188	H08	H10407_SANG_CHR OM2809_1_363	putative lipoprotein	416	CBJ02313	2
D000024190	H09	H10407_SANG_CHR OM1836_1_1125	ribonuclease D	1178	CBJ01340	1.3591
D000024191	H10	H10407_SANG_p666.0340_1_363	Not Available	416	Not Annotated	2
D000024193	H11	H10407_SANG_p948.0890_76_1200	Not Available	1181	Not Annotated	1.2752