

Enterotoxigenic *Escherichia coli* Expression Clone Set, Recombinant in *Escherichia coli*, Plate 7

Catalog No. NR-19796

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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-19796 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 7, NR-19796."

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 7 (EEXAG)

Clone	Well Position	Locus ID	Description (Gene name)	ORF Length	Accession Number	Average Depth of Coverage
D000023631	A02	H10407_SANG_CHR OM0453_1_147	hypothetical protein	200	Not Annotated	2
D000023634	A03	H10407_SANG_CHR OM1754_73_756	putative exported protein	740	Not Annotated	1.4784
D000023636	A04	H10407_SANG_CHR OM3920_148_315	putative transmembrane HD family hydrolase	224	Not Annotated	2
D000023638	A05	H10407_SANG_CHR OM2853_1_684	putative alpha-amylase precursor, pseudogene	737	Not Annotated	1.9701
D000023639	A06	H10407_SANG_CHR OM1074_1_171	hypothetical protein	224	Not Annotated	2
D000023641	A07	H10407_SANG_CHR OM0414_82_771	hypothetical protein	746	Not Annotated	1.9853
D000023643	A08	H10407_SANG_CHR OM1490_1_171	hypothetical protein	224	Not Annotated	2
D000023645	A09	H10407_SANG_CHR OM1140_1_693	basal-body rod modification protein FlgD	746	Not Annotated	1.9705
D000023647	A10	H10407_SANG_CHR OM1361_1_177	hypothetical protein	230	Not Annotated	2
D000023649	A11	H10407_SANG_CHR OM4720_1_693	minor tail protein	746	Not Annotated	1.9062
D000023651	A12	H10407_SANG_CHR OM4732_1_177	putative membrane protein	230	Not Annotated	2
D000023653	B01	H10407_SANG_CHR OM0830_1_696	putative phage minor tail protein	749	Not Annotated	1.8905
D000023655	B02	H10407_SANG_CHR OM1676_1_180	outer membrane lipoprotein	233	Not Annotated	2
D000023658	B03	H10407_SANG_CHR OM1238_1_696	putative minor tail protein L	749	Not Annotated	3.4486
D000023659	B04	H10407_SANG_p948.0910_1_180	<i>Escherichia coli</i> strain ETEC 27D CexE (cexE) gene	233	Not Annotated	2
D000023662	B05	H10407_SANG_CHR OM4528_1_696	hypothetical protein	749	Not Annotated	1.2951
D000023664	B06	H10407_SANG_p948.0910_181_360	Not Available	236	Not Annotated	2
D000023665	B07	H10407_SANG_CHR OM2531_148_849	hypothetical protein	758	Not Annotated	1.8971
D000023667	B08	H10407_SANG_p666.0650_1_186	hypothetical protein	239	Not Annotated	2
D000023669	B09	H10407_SANG_CHR OM0677_1_705	hypothetical protein	758	Not Annotated	1.9908
D000023671	B10	H10407_SANG_p666.0650_187_372	hypothetical protein	242	Not Annotated	2

Clone	Well Position	Locus ID	Description (Gene name)	ORF Length	Accession Number	Average Depth of Coverage
D000023673	B11	H10407_SANG_CHR OM3135_1_705	Not Available	758	Not Annotated	2
D000023675	B12	H10407_SANG_p666.0020_1_189	hypothetical protein	242	Not Annotated	2
D000023677	C01	H10407_SANG_CHR OM0551_1_708	Not Available	761	Not Annotated	2
D000023679	C02	H10407_SANG_CHR OM1960_1_192	hypothetical protein	245	Not Annotated	2
D000023681	C03	H10407_SANG_CHR OM1011_1_711	fimbrial precursor	764	Not Annotated	1.945
D000023683	C04	h104_Ch_g354_1_198	putative restriction endonuclease	251	Not Annotated	2
D000023686	C05	H10407_SANG_CHR OM0228_91_810	copper resistance protein A precursor	776	Not Annotated	1.9497
D000023687	C06	H10407_SANG_CHR OM2744_208_405	putative phage protein	254	Not Annotated	2
D000023690	C07	H10407_SANG_CHR OM2241_97_816	putative glycosyl hydrolase	776	Not Annotated	1.8634
D000023691	C08	h104_P666_g28_1_201	hypothetical protein	254	Not Annotated	2
D000023694	C09	H10407_SANG_CHR OM0226_1_735	putative peptidase	788	Not Annotated	1.7411
D000023695	C10	h104_Ch_g642_1_204	LacI-family transcriptional regulator	257	Not Annotated	2
D000023697	C11	H10407_SANG_CHR OM0327_1_735	putative prophage protein	788	Not Annotated	1.9023
D000023699	C12	h104_P666_g20_1_204	hypothetical protein	257	Not Annotated	2
D000023701	D01	H10407_SANG_CHR OM4715_1_738	phage major tail protein	791	Not Annotated	1.9279
D000023703	D02	H10407_SANG_CHR OM2638_1_204	hypothetical phage protein	257	Not Annotated	2
D000023705	D03	H10407_SANG_CHR OM0314_1_741	predicted AraC family DNA-binding transcriptional activator	794	CBI99818	1.8778
D000023708	D04	h104_Ch_g644_1_207	Not Available	260	Not Annotated	2
D000023710	D05	H10407_SANG_CHR OM3095_1_741	predicted NAD(P)-binding oxidoreductase with NAD(P)-binding Rossmann-fold domain	794	CBJ02597	1.3753
D000023711	D06	h104_Ch_g660_1_207	integral membrane protein	260	CBJ02717	2
D000023713	D07	H10407_SANG_CHR OM2198_1_744	putative colanic acid biosynthesis glycosyl transferase	797	CBJ01701	4.1493
D000023715	D08	h104_P52_g6_1_210	hypothetical protein	263	Not Annotated	2
D000023717	D09	H10407_SANG_CHR OM3813_79_822	putative endo-beta-N-acetylglucosaminidase	800	CBJ03316	1.3625
D000023719	D10	H10407_SANG_CHR OM1277_1_210	hypothetical protein	263	Not Annotated	2

Clone	Well Position	Locus ID	Description (Gene name)	ORF Length	Accession Number	Average Depth of Coverage
D000023721	D11	H10407_SANG_CHR OM2730_1_750	putative phage related protein	803	Not Annotated	1.8929
D000023725	E01	H10407_SANG_CHR OM2398_1_756	Not Available	809	Not Annotated	2
D000023727	E02	H10407_SANG_CHR OM1382_277_489	phosphatidylglycerophosphatase B	269	CBJ00885	2
D000023731	E04	h104_Ch_g519_1_216	Not Available	269	Not Annotated	1.9926
D000023733	E05	H10407_SANG_CHR OM4424_1_759	Not Available	812	Not Annotated	2
D000023735	E06	h104_Ch_g810_1_216	hypothetical protein	269	Not Annotated	2
D000023737	E07	H10407_SANG_CHR OM0977_1_762	putative membrane-associated peptidase	815	CBJ00485	2.8931
D000023740	E08	H10407_SANG_CHR OM1387_1_216	osmotically inducible lipoprotein B	269	CBJ00890	2
D000023741	E09	H10407_SANG_CHR OM0248_1_765	putative amidotransferase	818	Not Annotated	1.879
D000023743	E10	H10407_SANG_CHR OM3020_1_216	possible lipoprotein	269	CBJ02522	2
D000023745	E11	H10407_SANG_CHR OM1234_1_768	hypothetical protein	821	Not Annotated	1.8502
D000023749	F01	H10407_SANG_CHR OM1271b_1_768	hypothetical protein	821	Not Annotated	1.8709
D000023752	F02	H10407_SANG_CHR OM3543_1_216	large-conductance mechanosensitive channel	269	CBJ03043	2
D000023753	F03	H10407_SANG_CHR OM3057_1_768	hypothetical protein	821	Not Annotated	1.3788
D000023756	F04	h104_Ch_g879_1_222	putative acetyltransferase	275	CBJ03663	2
D000023759	F06	H10407_SANG_CHR OM1543_67_288	putative outer membrane porin protein	278	CBJ01047	2
D000023762	F07	H10407_SANG_CHR OM2359_1_774	putative exported protein	827	Not Annotated	1.9601
D000023763	F08	h104_Ch_g213_1_225	Not Available	278	Not Annotated	-
D000023766	F09	H10407_SANG_CHR OM4646_193_966	putative exported protein	830	Not Annotated	1.8217
D000023768	F10	h104_Ch_g402_1_225	Not Available	278	Not Annotated	1.9928
D000023769	F11	H10407_SANG_CHR OM1679_79_855	HlyD-family secretion protein	833	CBJ01183	1.6122
D000023772	F12	H10407_SANG_CHR OM2999_1_225	putative lipoprotein	278	CBJ02501	2
D000023773	G01	H10407_SANG_CHR OM1143_1_780	flagellar basal-body rod protein FlgG	833	CBJ00651	1.8535
D000023776	G02	h104_Ch_g210_1_228	Not Available	281	Not Annotated	2
D000023777	G03	H10407_SANG_CHR OM0567_1_783	hypothetical protein	836	Not Annotated	1.8983
D000023779	G04	h104_Ch_g646_1_228	Not Available	281	Not Annotated	2

Clone	Well Position	Locus ID	Description (Gene name)	ORF Length	Accession Number	Average Depth of Coverage
D000023781	G05	H10407_SANG_CHR OM2966_1_783	putative short chain dehydrogenase	836	CBJ02466	1.8959
D000023783	G06	h104_P666_g19_1_228	hypothetical protein	281	Not Annotated	2
D000023785	G07	H10407_SANG_CHR OM3942_1_783	Not Available	836	Not Annotated	-
D000023787	G08	H10407_SANG_CHR OM1196_1_231	putative prophage protein	284	CBJ00703	-
D000023789	G09	H10407_SANG_CHR OM2847_1_789	hypothetical protein	842	Not Annotated	3.7399
D000023792	G10	H10407_SANG_CHR OM2622_1_231	putative transmembrane anchored protein	284	CBJ02128	-
D000023793	G11	H10407_SANG_CHR OM0163_1_792	methionine aminopeptidase	845	CBI99664	1.8213
D000023795	G12	h104_Ch_g265_1_234	predicted transposase, pseudogene	287	Not Annotated	2
D000023797	H01	H10407_SANG_CHR OM0464_70_882	nucleoside-specific channel-forming protein	869	CBI99969	1.8113
D000023799	H02	H10407_SANG_CHR OM0351_433_666	putative fimbrial protein	290	CBI99856	3.2457
D000023801	H03	H10407_SANG_CHR OM1690_1_813	putative exported protein	866	Not Annotated	1.888
D000023803	H04	H10407_SANG_CHR OM0360_1_234	putative exported protein	287	Not Annotated	2
D000023805	H05	H10407_SANG_CHR OM2618_1_813	phage tail-fibre protein	866	CBJ02124	1.4781
D000023807	H06	H10407_SANG_CHR OM1109_1_234	putative fimbrial protein	287	CBJ00616	1.9861
D000023811	H08	H10407_SANG_CHR OM1710_1_234	Not Available	287	Not Annotated	2
D000023813	H09	H10407_SANG_CHR OM3576_1_813	probable general secretion pathway protein D precursor	866	CBJ03078	4.0382