

ENCODE DCC ANTIBODY VALIDATION DOCUMENT

Date of Submission: 6/22/11

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Antibody Name: BDP1

Target: BDP1

Company/Source: Donated by Dr. RJ White, The Beatson Institute for Cancer Research (antibody number 2663)

Catalog number or laboratory database ID: antibody number 2663

Lot Number: N/A

Antibody Description: Rabbit polyclonal - Antiserum 2663 was raised by immunizing rabbits with synthetic peptide CSDRYRIYKAQKLRE (human Bdp1 residues 139-153) coupled to KLH.

Target Description: 'B double-prime 1', subunit of RNA polymerase III transcription initiation factor III B

Target Species: Human

Host Species: Rabbit

Validation Method 1: IP-Mass Spec

Validation Method 2: Co-occupancy with another known subunit of the same transcription factor.

Purification Method:

Polyclonal/Monoclonal: Polyclonal

Reference: Fairley, J.A., Scott, P.H. & White, R.J. TFIIB is phosphorylated, disrupted and selectively released from tRNA promoters during mitosis *in vivo*. EMBO J. 22, 5841-5850 (2003)

Validation 1: IP-Mass Spec was performed by Linfeng Wu:

green1, Samples report created on 12/08/2008

Protein name	Number of	Accession number	Protein molecular	Protein Grc	Quantitativ	Taxonomy	Bdp1_replicat	Bdp1_replic
Gene_Symbol=CPS1 Isoform 1 of Carbamoyl-phosphate synthase [ammonia], mit	1	IP00011062	164,924.70	TRUE	unknown	unknown	46	57
Gene_Symbol=KRT1 Keratin, type II cytoskeletal 1	1	IP00220327	66,001.20	TRUE	unknown	unknown	41	46
Gene_Symbol=KRT9 Keratin, type I cytoskeletal 9	1	IP00019359	62,113.00	TRUE	unknown	unknown	28	27
Gene_Symbol=KRT10 Keratin, type I cytoskeletal 10	1	IP00009865	59,494.30	TRUE	unknown	unknown	27	24
Gene_Symbol=TTN Isoform 2 of Titin	1	IP00023283	3,805,514.50	TRUE	unknown	unknown	4	6
Gene_Symbol=PRKDC Isoform 1 of DNA-dependent protein kinase catalytic subu	1	IP00296337	469,077.50	unknown	unknown	unknown	16	7
Gene_Symbol=FAT Protocadherin Fat 1 precursor	1	IP00031411	506,550.80	unknown	unknown	unknown	1	4
Gene_Symbol=KRT2 Keratin, type II cytoskeletal 2 epidermal	1	IP00021304	65,848.40	TRUE	unknown	unknown	9	14
Gene_Symbol=C4A Complement C4-A precursor	1	IP00032258	192,754.80	TRUE	unknown	unknown	9	10
Gene_Symbol=CCT8 59 kDa protein	1	IP00302925	59,460.90	TRUE	unknown	unknown	4	1
REVERSED - Gene_Symbol=TTN Isoform 2 of Titin	1	###IP00023283	3,805,476.20	TRUE	unknown	unknown	2	2
Gene_Symbol=IARS IARS protein	1	IP00013234	120,612.30	unknown	unknown	unknown	5	5
Gene_Symbol=EPRS Bifunctional aminoacyl-tRNA synthetase	1	IP00013452	170,632.20	unknown	unknown	unknown	4	5
Gene_Symbol=LARS Leucyl-tRNA synthetase, cytoplasmic	1	IP00103994	134,452.80	TRUE	unknown	unknown	2	3
Gene_Symbol=PC Pyruvate carboxylase, mitochondrial precursor	1	IP00299402	129,616.70	unknown	unknown	unknown	3	3
Gene_Symbol=NAGLU Alpha-N-acetylglicosaminidase precursor	1	IP00008787	82,149.50	TRUE	unknown	unknown	2	3
Gene_Symbol=HSPA5 HSPA5 protein	1	IP00003362	72,405.60	unknown	unknown	unknown	3	4
Gene_Symbol=KRT5 Keratin, type II cytoskeletal 5	1	IP00009867	62,361.60	unknown	unknown	unknown	4	2
Gene_Symbol=LDHA Isoform 1 of L-lactate dehydrogenase A chain	1	IP00217966	36,671.20	TRUE	unknown	unknown	3	4
Gene_Symbol=ACTB Actin, cytoplasmic 1	1	IP00021439	41,719.80	unknown	unknown	unknown	4	4
Gene_Symbol=LGALS3BP Galectin-3-binding protein precursor	1	IP00023673	65,314.10	unknown	unknown	unknown	4	2
Gene_Symbol=KRT14 Keratin, type I cytoskeletal 14	1	IP00384444	51,604.60	TRUE	unknown	unknown	3	4
Gene_Symbol=ARHGAP21 Rho-GTPase activating protein 10	1	IP00169307	217,443.00	TRUE	unknown	unknown	0	1
Gene_Symbol=CAD CAD protein	1	IP00301263	242,964.50	TRUE	unknown	unknown	2	0
Gene_Symbol=HIP1R Huntingtin-interacting protein 1-related protein	1	IP00024417	119,371.70	unknown	unknown	unknown	4	1
Gene_Symbol=C3 Complement C3 precursor (Fragment)	1	IP00783987	187,131.10	unknown	unknown	unknown	3	2
Gene_Symbol=TUBA4A Tubulin alpha-4A chain	10	IP00007750,IP000	49,906.60	unknown	unknown	unknown	2	4
REVERSED - Gene_Symbol=MET Isoform 1 of Hepatocyte growth factor receptor	1	###IP00029273	155,511.10	unknown	unknown	unknown	2	0
Gene_Symbol=CACNA1H Isoform 1 of Voltage-dependent T-type calcium channel	1	IP00028915	259,147.10	unknown	unknown	unknown	1	2
Gene_Symbol=BDP1 transcription factor-like nuclear regulator	1	IP00760877	293,864.60	unknown	unknown	unknown	2	0
Gene_Symbol=CSE1L Isoform 1 of Exportin-2	1	IP00022744	110,403.90	unknown	unknown	unknown	1	1
Gene_Symbol=HSP90AB1 Heat shock protein HSP 90-beta	1	IP00414676	83,249.30	TRUE	unknown	unknown	3	1
REVERSED - Gene_Symbol=PRKCZ Protein kinase C zeta type	1	###IP00013749	67,644.00	unknown	unknown	unknown	0	1
Gene_Symbol=KRT6A Keratin, type II cytoskeletal 6A	1	IP00300725	60,028.40	TRUE	unknown	unknown	3	0
Gene_Symbol=MSH6 Isoform GTBP-N of DNA mismatch repair protein Msh6	1	IP00384456	152,771.90	unknown	unknown	unknown	3	0
Gene_Symbol=KRT16 Keratin, type I cytoskeletal 16	1	IP00217963	51,251.00	TRUE	unknown	unknown	2	0
REVERSED - Gene_Symbol=FRAP1 FKBP12-rapamycin complex-associated protein	1	###IP00031410	288,879.00	unknown	unknown	unknown	0	2
Gene_Symbol=RGNEF Isoform 4 of Rho-guanine nucleotide exchange factor	1	IP00880094	185,828.50	unknown	unknown	unknown	1	0
Gene_Symbol=NASP Isoform 1 of Nuclear autoantigenic sperm protein	2	IP00179953,IP000	85,217.50	unknown	unknown	unknown	2	0
Gene_Symbol=DNAH1 Isoform 2 of Dynein heavy chain 1, axonemal	1	IP00002127	485,928.80	unknown	unknown	unknown	1	0
Gene_Symbol=HSP90B1 Endoplasmic precursor	1	IP00027230	92,453.70	TRUE	unknown	unknown	1	0
Gene_Symbol=VAMP4 Isoform 2 of Vesicle-associated membrane protein 4	1	IP00219648	16,223.20	unknown	unknown	unknown	1	0
Gene_Symbol=LRCH2 Leucine-rich repeat and calponin homology domain-contain	1	IP00745038	84,572.10	unknown	unknown	unknown	0	1

Validation 2: Bdp1 occupancy is correlated extremely well with occupancy by Brf1.
Both are subunits of the transcription factor TFIIB:
(From Moqtaderi et al., NSMB 2010 17: 635-640)

