

ENCODE DCC ANTIBODY VALIDATION DOCUMENT

Date of Submission: 6/22/11

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Lab: Struhl

Antibody Name: BRF1

Target: BRF1

Company/Source: Donated by Dr. RJ White, The Beatson Institute for Cancer Research antibody number 128

Catalog number or laboratory database ID: antibody number 128

Lot Number: N/A

Antibody Description: Rabbit polyclonal - Anti-BRF antibody 128 was raised by immunising rabbits with synthetic peptide KISSKINYSVLRGLS (human BRF residues 533-547) coupled to keyhole limpet haemocyanin.

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

Target Species: Human

Host Species: Rabbit

Validation Method 1: IP-Mass Spec

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

Purification Method:

Polyclonal/Monoclonal: Polyclonal

Reference: Cairns, C.A. & White, R.J. p53 is a general repressor of RNA polymerase III transcription. EMBO J. 17, 3112–3123 (1998).

Validation 1: IP-Mass Spec performed by Linfeng Wu shows the presence of the expected protein:

Number of	Accession numb	Protein molecula	Protein Grd	Quantitativ	Taxonomy	Brf1_replicate1	Brf1_replicate2
1	IPI00220327	66,001.20	TRUE		unknown	46	36
1	IPI00514734	24,188.40			unknown	17	25
1	IPI00009865	59,494.30	TRUE		unknown	28	26
1	IPI00021304	65,848.40	TRUE		unknown	24	21
1	IPI00019359	62,113.00	TRUE		unknown	26	22
1	IPI00023283	3,805,514.50	TRUE		unknown	4	0
1	IPI00011062	164,924.70	TRUE		unknown	14	10
1	IPI00032258	192,754.80			unknown	10	11
1	IPI00296337	469,077.50	TRUE		unknown	6	2
1	IPI00382420	11,878.10			unknown	3	5
1	IPI00003362	72,405.60	TRUE		unknown	7	6
1	IPI00218342	101,543.50			unknown	5	5
1	IPI00016859	73,823.40			unknown	5	3
1	IPI00217920	85,094.70			unknown	6	2
1	IPI00783987	187,131.10			unknown	4	3
1	IPI00005859	59,487.10			unknown	3	3
1	IPI00182757	102,885.10			unknown	1	3
1	IPI00021439	41,719.80			unknown	1	4
1	IPI00414676	83,249.30			unknown	3	2
1	IPI00014424	50,452.60			unknown	2	2
1	##IPI00382869	39,646.10			unknown	2	0
2	IPI00219217,IPI0	36,620.60			unknown	1	2
1	IPI00003865	70,881.80	TRUE		unknown	2	1
1	IPI00514002	506,722.80			unknown	0	1
1	IPI00304925	70,036.00	TRUE		unknown	1	2
1	##IPI00879118	27,554.50			unknown	0	1
1	##IPI00329349	51,059.20			unknown	0	2
1	##IPI00382412	42,934.80			unknown	0	1
1	IPI00142538	302,963.70			unknown	1	0
1	##IPI00783879	296,843.30			unknown	0	1
1	IPI00010341	25,213.30	TRUE		unknown	0	1

Validation 2: Brf1 shows extremely high co-occupancy with Bdp1 by ChIP-seq. Both are subunits of TFIIB. (From Moqtaderi et al., NSMB 2010 17: 635-640)

