

# TransFactor Kits Data Sheet

(PT3594-3)

This Data Sheet provides background information and experimental parameters for TransFactor Kits. Please use this information in conjunction with the procedures in the User Manual. See the following pages for additional details.

TABLE I. SUMMARY OF TRANSFACTOR KIT TRANSCRIPTION FACTORS

Transcription Factor	Cis-Acting DNA Element	Tested Cellular Extract Treatment	Cat. No.			
			Individual	Family <sup>3</sup>	Profiling <sup>4</sup>	Chemi-luminescent Universal Specific <sup>5</sup>
ATF-2	CRE	Jurkat			631919 <sup>1</sup>	
CREB-1	CRE	Jurkat			631919 <sup>1</sup>	
c/EBP $\alpha$	C/EBP	Rat Liver <sup>2</sup>			631938	
DP-1	E2F	Raji			631936	
E2F-1	E2F	Raji			631936	
E2F-2	E2F	Raji			631936	
Egr-1	Egr	HeLa (PMA)			631938 <sup>1</sup>	
c-Fos	AP-1	HeLa (PMA)			631919 631935	
FosB	AP-1	HeLa (PMA)			631935	
HIF-1 $\alpha$	HIF	Cos-7 (CoCl <sub>2</sub> )		631939	631938 <sup>1</sup>	
HIF-1 $\beta$	HIF	Cos-7 (CoCl <sub>2</sub> )		631939	631938 <sup>1</sup>	
c-Jun	AP-1	HeLa (PMA)			631935 <sup>1</sup>	631960
JunD	AP-1	HeLa (PMA)			631935	
Max	Myc/Max	U-937			631937	
c-Myb	c-Myb	Jurkat			631937 <sup>1</sup>	
c-Myc	Myc/Max	U-937			631937	
NFATc1	NFAT	Jurkat (PHA)	631954			631955
NF $\kappa$ B p50	NF $\kappa$ B	HeLa (TNF- $\alpha$ )	631916	631945 <sup>1</sup>	631919	631947 <sup>1</sup> 631948 <sup>1</sup>
NF $\kappa$ B p52	NF $\kappa$ B	Raji	631949	631945		631948
NF $\kappa$ B p65	NF $\kappa$ B	HeLa (TNF- $\alpha$ )	631930	631945 <sup>1</sup>	631919	631947 <sup>1</sup> 631948 <sup>1</sup>
Oct I	Oct	U-937			631938	
Oct II	Oct	Raji			631938 <sup>1</sup>	
p53	p53	Raji			631937 <sup>1</sup>	
p107	E2F	NIH/3T3			631936 <sup>1</sup>	
PPAR $\alpha$	PPAR	Rat Liver <sup>2</sup>		631940 <sup>1</sup>		
PPAR $\beta$	PPAR	THP-1 (PMA) <sup>2</sup>		631940		
PPAR $\gamma$	PPAR	THP-1 (PMA) <sup>2</sup>		631940		
Rb	E2F	Raji			631936	
c-Rel	NF $\kappa$ B	Raji		631945	631919 <sup>1</sup>	631948
RelB	NF $\kappa$ B	Raji		631945		631948
Sp1	Sp1/Sp3	Raji			631935 <sup>1</sup> 631936	
STAT1	STAT1	U-937 (IFN- $\gamma$ )			631935 <sup>1</sup>	631959
STAT3	STAT3	HepG2 (IL-6)	631953			631952 631958
USF1	USF	U-937			631937	
USF2	USF	U-937			631937	

<sup>1</sup> Cellular extract is not provided with some TransFactor Kits.

<sup>2</sup> Nuclear extract used.

<sup>3</sup> Family kits are designed for study of different members of a transcription factor family.

<sup>4</sup> Profiling Kits are designed for study of multiple factors related to a stimulus or disease.

<sup>5</sup> TransFactor Universal Specific Kits are designed for use only with TransFactor Universal Colorimetric or Chemiluminescent Kits.

Information continues on the following pages.



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TABLE II. COLORIMETRIC TRANSFACTOR KIT PARAMETERS

Transcription Factor	Consensus Binding Sequence	1° Antibody Type	1° Antibody Dilution <sup>a</sup>	Cross-reactivity		References
				mouse	rat	
ATF-2	TGACATCA	Polyclonal <sup>b</sup>	1:100	Yes	Yes	7
CREB-1	TGACATCA	Polyclonal <sup>b</sup>	1:100	Yes	Yes	7
c/EBP $\alpha$	TTGCGCAAT	Polyclonal <sup>b</sup>	1:100	Yes	Yes	12
DP-1	TAGGCGCGAA	Monoclonal <sup>c</sup>	1:100	No	No	10
E2F-1	TAGGCGCGAA	Monoclonal <sup>c</sup>	1:50	Yes	Yes	10
E2F-2	TAGGCGCGAA	Monoclonal <sup>c</sup>	1:100	No	No	10
Egr-1	GCGGGGGCGAGCGGGGGCG	Polyclonal <sup>b</sup>	1:500	Yes	Yes	16
c-Fos	TGACTCA	Polyclonal <sup>b</sup>	1:100	Yes	Yes	2
FosB	TGACTCA	Polyclonal <sup>b</sup>	1:25	Yes	Yes	2
HIF-1 $\alpha$	GCCCTACGTGCTGTCTCA	Monoclonal <sup>c</sup>	1:100	Yes	Yes	13, 14
HIF-1 $\beta$	GCCCTACGTGCTGTCTCA	Monoclonal <sup>c</sup>	1:100	Yes	Yes	13, 14
c-Jun <sup>d</sup>	TGACTCA	Monoclonal <sup>c</sup>	1:100	Yes	Yes	2
JunD	TGACTCA	Polyclonal <sup>b</sup>	1:100	Yes	Yes	2
Max	CACGTG	Monoclonal <sup>c</sup>	1:100	Yes	No	11
c-Myb	TAACGGTT	Polyclonal <sup>b</sup>	1:50	Yes	Yes	1
c-Myc	CACGTG	Polyclonal <sup>b</sup>	1:50	Yes	Yes	11
NFATc1	GAGGAAAATTTG	Monoclonal <sup>c</sup>	1:100	Yes	No	20, 21
NF $\kappa$ B p50 <sup>e</sup>	GGGGATCCC	Polyclonal <sup>b</sup>	1:5000	Yes	No	6
NF $\kappa$ B p52	GGGGTATTTCC	Polyclonal <sup>b</sup>	1:2000	No	No	6
NF $\kappa$ B p65	GGGGTATTTCC	Polyclonal <sup>b</sup>	1:500	Yes	Yes	6, 9
Oct I	ATTTGCAT	Polyclonal <sup>b</sup>	1:250	Yes	Yes	17
Oct II	ATTTGCAT	Polyclonal <sup>b</sup>	1:250	Yes	Yes	17
p107	TAGGCGCGAA	Monoclonal <sup>c</sup>	1:100	No	No	10
p53	GAACATGTCTAAGCATGCTG	Monoclonal <sup>c</sup>	1:100	Yes	Yes	5
PPAR $\alpha$	AGGTCAAAGGTCA	Polyclonal <sup>b</sup>	1:100	Yes	Yes	15
PPAR $\beta$	AGGTCAAAGGTCA	Polyclonal <sup>b</sup>	1:100	Yes	Yes	15
PPAR $\gamma$	AGGTCAAAGGTCA	Polyclonal <sup>b</sup>	1:50	Yes	Yes	15
Rb	TAGGCGCGAA	Monoclonal <sup>c</sup>	1:100	No	No	10
c-Rel	GGGGTATTTCC	Polyclonal <sup>b</sup>	1:100	Yes	Yes	6
RelB	GGGGTATTTCC	Polyclonal <sup>b</sup>	1:100	Yes	Yes	6
Sp1	GTGGGGGCGGGGC	Monoclonal <sup>c</sup>	1:100	Yes	Yes	4
STAT1 <sup>f</sup>	ATTCTGTAAAG	Monoclonal <sup>c</sup>	1:100	Yes	Yes	8
STAT3 <sup>f</sup>	TTCTGGGAATT	Polyclonal <sup>b</sup>	1:100	Yes	Yes	19
USF1	CACGTG	Polyclonal <sup>b</sup>	1:100	Yes	Yes	3
USF2	CACGTG	Polyclonal <sup>b</sup>	1:100	Yes	Yes	3

<sup>a</sup> For ELISA only

<sup>b</sup> 2° Antibody: Anti-rabbit (IgG-HRP)

<sup>c</sup> 2° Antibody: Anti-mouse (IgG-HRP)

<sup>d</sup> Use 1 M H<sub>2</sub>SO<sub>4</sub> as stop solution.

<sup>e</sup> NF $\kappa$ B p50 also binds the consensus binding sequence GGGGTATTTCC used in the TransFactor Family NF $\kappa$ B Colorimetric Kit (Cat. No. 631945) and the Chemiluminescent TransFactor Kits.

<sup>f</sup> 0.5  $\mu$ g poly dIdC should be added to each sample for the binding reaction.

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TABLE III. CHEMILUMINESCENT TRANSFACTOR KIT PARAMETERS

Transcription Factor	Consensus Binding Sequence	1° Antibody Type	1° Antibody Dilution <sup>a</sup>	Cross-reactivity		References
				mouse	rat	
NFATc1	GAGGAAAATTTG	Monoclonal <sup>c</sup>	1:500	Yes	No	20, 21
NFκB p50	GGGGTATTTCC	Polyclonal <sup>b</sup>	1:25,000	Yes	No	6
NFκB p52	GGGGTATTTCC	Polyclonal <sup>b</sup>	1:10,000	No	No	6
NFκB p65	GGGGTATTTCC	Polyclonal <sup>b</sup>	1:2,500	Yes	Yes	6, 9
c-Rel	GGGGTATTTCC	Polyclonal <sup>b</sup>	1:500	Yes	Yes	6
RelB	GGGGTATTTCC	Polyclonal <sup>b</sup>	1:2,000	Yes	Yes	6
STAT3	TTCTGGGAATT	Polyclonal <sup>b</sup>	1:500	Yes	Yes	19

<sup>a</sup> for ELISA only

<sup>b</sup> 2° Antibody: Anti-rabbit (IgG-HRP)

<sup>c</sup> 2° Antibody: Anti-mouse (IgG-HRP)

TABLE IV. TRANSFACTOR UNIVERSAL SPECIFIC KIT PARAMETERS

Transcription Factor	Consensus Binding Sequence	1° Antibody Type	1° Antibody Dilution <sup>a</sup>	1° Antibody Dilution <sup>a</sup>	Cross-reactivity		References
			(Color.) <sup>e</sup>	(Chemi.) <sup>f</sup>	mouse	rat	
c-Jun <sup>d</sup>	TGACTCA	Polyclonal <sup>b</sup>	1:100	1:500	Yes	Yes	2
c-Jun (p63) <sup>d</sup>	TGACTCA	Monoclonal <sup>c</sup>	1:100	1:500	N/A	N/A	2
STAT1 <sup>d</sup>	ATTCTGTAAAG	Monoclonal <sup>c</sup>	1:100	1:500	Yes	Yes	8
STAT3 <sup>d</sup>	TTCTGGGAATT	Polyclonal <sup>b</sup>	1:100	1:500	Yes	Yes	19

<sup>a</sup> For ELISA only

<sup>b</sup> 2° Antibody: Anti-rabbit (IgG-HRP)

<sup>c</sup> 2° Antibody: Anti-mouse (IgG-HRP)

<sup>d</sup> 0.5 µg poly dIdC should be added to each sample for the binding reaction.

<sup>e</sup> Use these dilutions with TransFactor Universal Colorimetric Kits.

<sup>f</sup> Use these dilutions with TransFactor Universal Chemiluminescent Kits.

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