

# ENCODE DCC Antibody Validation Document

Date of Submission

Name:

Email:

Lab

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Antibody Name:

Target:

Company/  
Source:

Catalog Number, database ID, laboratory

Lot Number

Antibody  
Description:

Target  
Description:

Species Target

Species Host

Validation Method #1

Validation Method #2

Purification  
Method

Polyclonal/  
Monoclonal

Vendor URL:

Reference (PI/  
Publication  
Information)

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Please complete the following for antibodies to histone modifications:  
*if your specifications are not listed in the drop-down box,  
please write-in the appropriate information*

Histone Name

AA modified

AA Position

Modification

Validation #1  
Analysis



Insert Validation Image (click here)

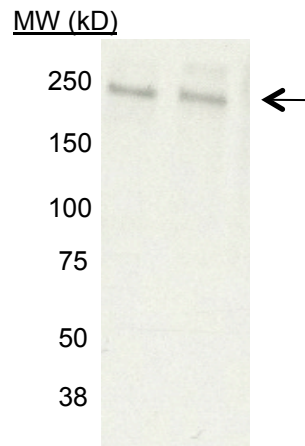


## Immunoblot/Immunoprecipitation

Antibody: RNA Polymerase II Source: Covance MMS-126R

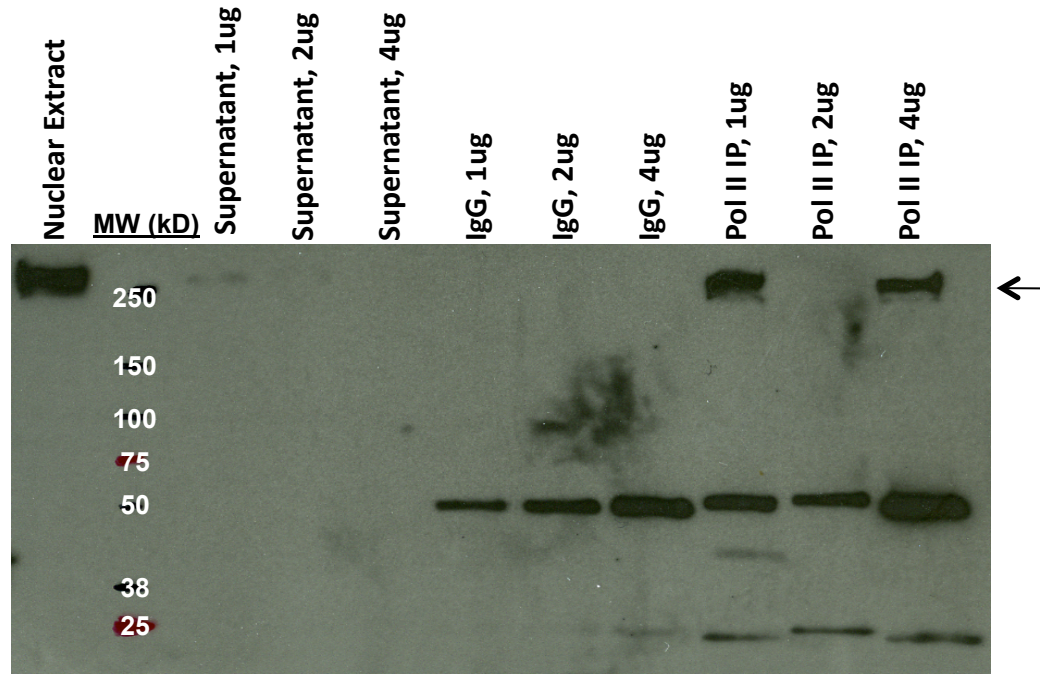
Epitope: The antibody 8WG16 was developed using RNA polymerase (RNA pol II) purified from wheat germ extract. It recognizes the C-terminal heptapeptide repeat present on the largest subunit of pol II.

A.



Immunoblot analysis of extracts from cell lines K562 (left) and HeLaS3 (right) using MMS-126R.

B.



GM12878 nuclear extract was immunoprecipitated with 1, 2 and 4ug Pol II antibody (Covance, MMS-126R) or normal mouse IgG as a negative control. Supernatant was checked to see the completion of IP. Arrow indicates band specifically immunoprecipitated by MMS-126R

Validation #2  
Analysis



Insert Validation Image (Click here)



Protein name	Peptide count	Peptide count	Peptide count	Peptide count
	IgG control Rep1	IgG control Rep2	MMS126R Rep1	MMS126R Rep2
POLR2A DNA-directed RNA polymerase II subunit RPB1	0	0	160	233
POLR2B DNA-directed RNA polymerase II subunit RPB2	0	0	121	170
RPAP2 Isoform 1 of RNA polymerase II-associated protein 2	0	0	21	27
POLR2G DNA-directed RNA polymerase II subunit RPB7	0	0	18	27
POLR2H DNA-directed RNA polymerases I, II, and III subunit RPABC3	0	0	17	20
POLR2C DNA-directed RNA polymerase II subunit RPB3	0	0	13	20
POLR2J RPB11a protein	0	0	9	5
POLR2E DNA-directed RNA polymerases I, II, and III subunit RPABC1	0	0	8	8
POLR2I DNA-directed RNA polymerase II subunit RPB9	0	0	7	11
ALMS1 ALMS1	0	0	5	0
POLR2D DNA-directed RNA polymerase II subunit RPB4	0	0	3	8
GRINL1A;Gcom1 Isoform 12 of Protein GRINL1A	0	0	3	8
RECQL5 Isoform Beta of ATP-dependent DNA helicase Q5	0	0	3	3
POLR2L DNA-directed RNA polymerases I, II, and III subunit RPABC5	0	0	2	7
KRT6A Keratin, type II cytoskeletal 6A	0	0	2	3
POLR2K DNA-directed RNA polymerases I, II, and III subunit RPABC4	0	0	2	2
RFC4 Replication factor C subunit 4	0	0	2	0
RFC2 Isoform 1 of Replication factor C subunit 2	0	0	2	0
GAN Gigaxonin	0	0	1	0
POLR3E Isoform 3 of DNA-directed RNA polymerase III subunit RPC5	0	0	0	1
HIST1H1D Histone H1.3	0	0	0	1
RPL36 60S ribosomal protein L36	0	1	2	0
RPL31 60S ribosomal protein L31	0	2	1	1
PLEC1 Isoform 1 of Plectin-1	0	2	0	0
TUBB2C Tubulin beta-2C chain	0	2	0	0
GPSN2 Isoform 1 of Synaptic glycoprotein SC2	0	2	0	0
HNRPUL1 Isoform 1 of Heterogeneous nuclear ribonucleoprotein U-like protein 1	1	0	5	7
FLG2 Ifapsoriasis	1	0	2	2
RPS26 Novel protein similar to ribosomal protein 26 RPS26	1	0	1	2
- Similar to ribosomal protein S27	1	0	1	0
RPS23 40S ribosomal protein S23	1	0	0	2
PRKDC Isoform 1 of DNA-dependent protein kinase catalytic subunit	1	0	0	0
MSH3 DNA mismatch repair protein Msh3	1	0	0	0
APOBEC3B Isoform 1 of Probable DNA dC->dU-editing enzyme APOBEC-3B	1	0	0	0
RPL27 60S ribosomal protein L27	1	0	0	0
IGKC Immunoglobulin light chain (Fragment)	1	1	2	0
SLC25A3 Isoform A of Phosphate carrier protein, mitochondrial precursor	1	1	1	1

CETN2 Centrin-2	1	1	0	2
BANF1 Barrier-to-autointegration factor	1	1	0	1
RPS20 40S ribosomal protein S20	1	2	2	0
RPL28 60S ribosomal protein L28	1	2	1	2
HIST1H2AH Histone H2A type 1-H	1	3	4	3
RPL18 60S ribosomal protein L18	1	4	0	0
RALY RNA binding protein (Fragment)	2	0	1	0
RPL26L1 60S ribosomal protein L26-like 1	2	0	0	0
TFG Protein TFG	2	0	0	0
ATP5A1 ATP synthase subunit alpha, mitochondrial precursor	2	0	0	0
EWSR1 cDNA FLJ31747 fis, clone NT2RI2007377, highly similar to RNA-BINDING PROTEIN EWS	2	1	8	8
PDCD6 Programmed cell death protein 6	2	1	1	1
RPS10 40S ribosomal protein S10	2	1	0	2
RPL37A 60S ribosomal protein L37a	2	1	0	1
TCEB2 Transcription elongation factor B polypeptide 2	2	1	0	0
RPL6 60S ribosomal protein L6	2	1	0	0
HNRPDL Isoform 1 of Heterogeneous nuclear ribonucleoprotein D-like	2	1	0	0
RBMS1 Isoform 2 of RNA-binding motif, single-stranded-interacting protein 1	2	1	0	0
KRT18 Keratin, type I cytoskeletal 18	2	1	0	0
PCBP1 Poly(rC)-binding protein 1	2	2	3	0
RPL30 60S ribosomal protein L30	2	2	2	3
RPL11 Isoform 1 of 60S ribosomal protein L11	2	2	2	2
RPLP1 60S acidic ribosomal protein P1	2	2	1	2
RPS5 40S ribosomal protein S5	2	2	1	1
RPL23A;hCG_16001 60S ribosomal protein L23a	2	2	1	1
FAU ubiquitin-like protein fubi and ribosomal protein S30 precursor	2	2	1	1
HNRNPA2B1 HNRPA2B1 protein	2	2	0	1
DDX3X ATP-dependent RNA helicase DDX3X	2	2	0	1
RPL35 60S ribosomal protein L35	2	2	0	1
SUB1 Activated RNA polymerase II transcriptional coactivator p15	2	2	0	0
PHGDH D-3-phosphoglycerate dehydrogenase	2	2	0	0
RPS25 40S ribosomal protein S25	2	2	0	0
EEF1A2 Elongation factor 1-alpha 2	2	2	0	0
GAPDH Glyceraldehyde-3-phosphate dehydrogenase - 15 kDa protein	2	2	0	0
PCMT1 Isoform 1 of Protein-L-isoaspartate(D-aspartate) O-methyltransferase	2	2	0	0
RPS11 40S ribosomal protein S11	2	3	2	1
RPL8 60S ribosomal protein L8	2	3	2	1
RPS24 Isoform 1 of 40S ribosomal protein S24	2	3	1	1
RPL13 60S ribosomal protein L13	2	4	1	1

CPS1 Isoform 1 of Carbamoyl-phosphate synthase [ammonia], mitochondrial precursor	3	0	1	1
TTN Isoform 2 of Titin	3	0	1	0
RPL24 60S ribosomal protein L24	3	1	2	2
TIAL1 Nucleolysin TIAR	3	1	1	0
HNRNPA1 Isoform A1-B of Heterogeneous nuclear ribonucleoprotein A1	3	1	1	0
RBMS2 RNA-binding motif, single-stranded-interacting protein 2	3	1	0	0
LOC284393 similar to QM protein isoform 1	3	1	0	0
KRT75 Keratin, type II cytoskeletal 75	3	2	5	1
RPL38 60S ribosomal protein L38	3	2	2	3
RPL7A 60S ribosomal protein L7a	3	2	1	3
RPL18A 60S ribosomal protein L18a	3	2	1	1
RPS16 40S ribosomal protein S16	3	2	1	1
TREX1;ATRIP Isoform 3 of Three prime repair exonuclease 1	3	2	1	0
hCG_21078 hypothetical protein LOC389435	3	3	3	3
RBM14 Isoform 1 of RNA-binding protein 14	3	3	2	2
APOBEC3C;APOBEC3D Probable DNA dC->dU-editing enzyme APOBEC-3C	3	3	1	2
GRPEL1 GrpE protein homolog 1, mitochondrial precursor	3	3	0	0
RPLP0 60S acidic ribosomal protein P0	3	4	4	2
RPL23 60S ribosomal protein L23	3	4	3	3
HIST2H2BE Histone H2B type 2-E	3	4	1	3
RPS19 40S ribosomal protein S19	3	4	0	0
RPS2 40S ribosomal protein S2	3	5	3	1
RPL7 60S ribosomal protein L7	3	5	2	1
- Anti-colorectal carcinoma heavy chain	3	8	11	15
KRT16 Keratin, type I cytoskeletal 16	4	0	6	6
CEBPB CCAAT/enhancer-binding protein beta	4	0	0	0
RPL12 60S ribosomal protein L12	4	2	3	3
RPLP2 60S acidic ribosomal protein P2	4	3	1	3
HNRPH1 Heterogeneous nuclear ribonucleoprotein H	4	3	0	0
RPS8 40S ribosomal protein S8	4	3	0	0
RPS13 40S ribosomal protein S13	4	4	4	4
MSH2 DNA mismatch repair protein Msh2	4	5	2	0
RPS6 40S ribosomal protein S6	4	7	2	1
RAD23B UV excision repair protein RAD23 homolog B	4	7	0	1
TOP3A Isoform Long of DNA topoisomerase 3-alpha	5	2	0	3
PCBP2 poly(rC)-binding protein 2 isoform b	5	3	4	4
HNRNPU Isoform Short of Heterogeneous nuclear ribonucleoprotein U	5	5	2	2
LOC388344 similar to RPL13 protein	5	8	1	2
HLTF Isoform 1 of Helicase-like transcription factor	6	2	5	4
RPS3 40S ribosomal protein S3	6	4	3	2

FUS Isoform Short of RNA-binding protein FUS	6	7	8	7
IGKV4-1 Similar to Ig kappa chain V-IV region precursor	7	5	4	2
HIST1H4E;HIST1H4A;HIST2H4B;HIST1H4L;HIST1H4F;HIST1H4C;HIST2H4A;HIST1H4I;HIST1H4D;HIST4H4;HIST1H4K;HIST1H4J;HIST1H4B;HIST1H4H				
Histone H4	7	7	5	5
RPL4 60S ribosomal protein L4	7	8	0	0
GRN Isoform 1 of Granulins precursor	7	9	3	5
HSPA8 Isoform 1 of Heat shock cognate 71 kDa protein	7	10	10	10
KRT14 Keratin, type I cytoskeletal 14	8	6	6	3
WDR76 WD repeat-containing protein 76	8	6	4	4
PARP1 Poly [ADP-ribose] polymerase 1	8	9	3	5
HNRNPC Isoform C1 of Heterogeneous nuclear ribonucleoproteins C1/C2	8	10	10	13
XPC DNA-repair protein complementing XP-C cells	8	14	3	6
RPS9 40S ribosomal protein S9	9	7	2	2
HNRPK Isoform 1 of Heterogeneous nuclear ribonucleoprotein K	9	8	1	0
SLC25A5 ADP/ATP translocase 2	9	12	6	6
IMPDH2 Inosine-5'-monophosphate dehydrogenase 2	10	6	0	0
RPS18;LOC100130553 40S ribosomal protein S18	10	8	3	3
TUBA1B Tubulin alpha-1B chain	10	12	2	4
XRCC5 ATP-dependent DNA helicase 2 subunit 2	11	7	7	7
HNRNPA2B1 Isoform B1 of Heterogeneous nuclear ribonucleoproteins A2/B1	11	8	4	3
PURA Transcriptional activator protein Pur-alpha	11	9	12	9
HSPA1A;HSPA1B Heat shock 70 kDa protein 1	12	5	9	7
HSPA5 HSPA5 protein	12	13	12	16
XRCC6 ATP-dependent DNA helicase 2 subunit 1	12	14	9	11
HNRPAB Isoform 4 of Heterogeneous nuclear ribonucleoprotein A/B	13	6	6	3
KRT5 Keratin, type II cytoskeletal 5	14	10	9	8
TUBB Tubulin beta chain	15	9	1	1
RPS4X 40S ribosomal protein S4, X isoform	17	13	5	8
ALB Uncharacterized protein ALB	19	5	4	1
PURB Transcriptional activator protein Pur-beta	19	20	15	13
HNRPD Isoform 1 of Heterogeneous nuclear ribonucleoprotein D0	20	18	13	9
CSDA Isoform 1 of DNA-binding protein A	20	21	4	6
RPA3 Replication protein A 14 kDa subunit	25	32	24	32
RPA2 Isoform 1 of Replication protein A 32 kDa subunit	29	55	23	23
KRT9 Keratin, type I cytoskeletal 9	46	35	17	12
SSBP1 Single-stranded DNA-binding protein, mitochondrial precursor	50	75	52	61
YBX1 Nuclease-sensitive element-binding protein 1	59	58	21	18
KRT2 Keratin, type II cytoskeletal 2 epidermal	73	60	54	59
KRT10 Keratin, type I cytoskeletal 10	85	83	69	89
KRT1 Keratin, type II cytoskeletal 1	103	96	77	81



RPA1 Replication protein A 70 kDa DNA-binding subunit	114	161	89	142
HSPA9 Stress-70 protein, mitochondrial precursor	142	176	106	136