

TDG Polyclonal Antibody

Product Details	
Size	100 µL
Species Reactivity	Human
Host/Isotype	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	Recombinant protein fragment corresponding to a region within amino acids 1 and 410 of Human TDG
Form	Liquid
Concentration	1 mg/mL
Purification	Antigen affinity chromatography
Storage buffer	PBS, pH 7, with 20% glycerol
Contains	0.01% thimerosal
Storage conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.
RRID	AB_2546616

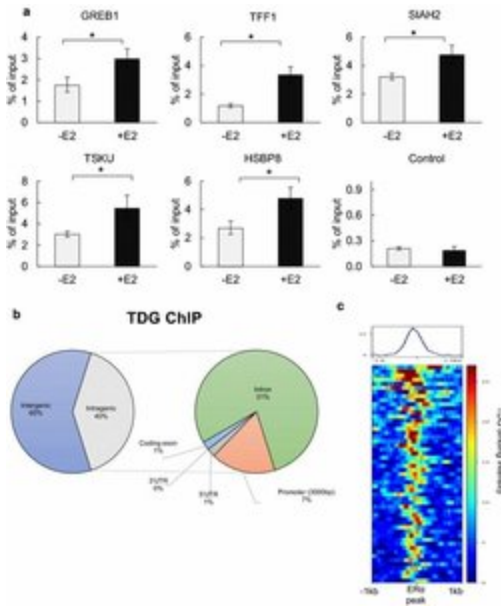
Applications	Tested Dilution	Publications
Western Blot (WB)	1:5,000-1:20,000	2 Publications
Immunocytochemistry (ICC/IF)	1:100-1:1,000	-
ChIP assay (ChIP)	-	1 Publication

Product Specific Information

Recommended positive controls: HeLa, Jurkat, Raji, NCI-H929, TDG-transfected 293T.

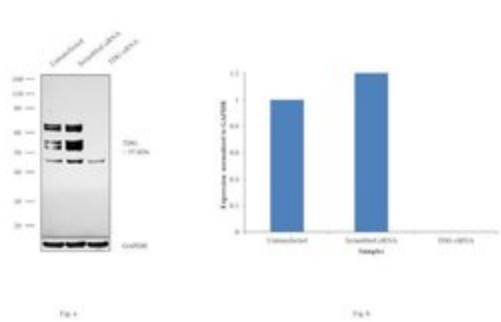
Predicted reactivity: Human (99%), Mouse (88%), Rat (87%), Bovine (91%).

Store product as a concentrated solution. Centrifuge briefly prior to opening the vial.



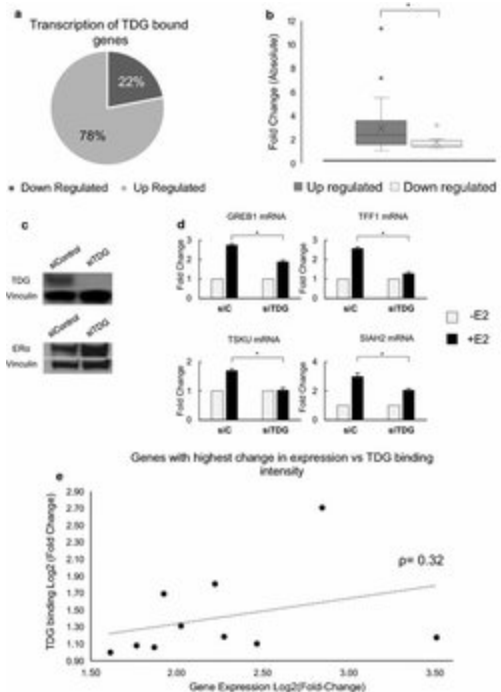
TDG Antibody (PA5-29140)

Fig. 1 Global analysis of E2-dependent TDG localization. a MCF7 cells were treated with 100 nM of E2 (45 min) and ChIP-qPCR was performed using TDG antibody. Region used as negative control shows low level of TDG binding in ChIP-Seq data with no change in levels after E2 treatment. (* p value < 0.05, error bars represent standard deviation of the mean, n > 2). b Sites of E2-dependent TDG binding were mapped to the annotated genome using CEAS. c Sites of ER binding ([?] 1000 bp) overlaid with TDG binding signal, showing strong relationship between location of TDG binding and ER binding at these regions Cell treatment validation info.



TDG Antibody (PA5-29140)

Antibody specificity was demonstrated by siRNA mediated knockdown of target protein. HeLa cells were transfected with TDG siRNA and loss of signal was observed in Western Blot using TDG Polyclonal Antibody (Product # PA5-29140). Knockdown validation info.



TDG Antibody (PA5-29140)

Fig. 4 TDG is required for E2-dependent gene expression. TDG peaks were mapped to genes using GREAT software and cross-referenced with publicly available MCF7 E2-dependant expression data. a Most genes associated with TDG binding undergo upregulation in response to E2 and b the fold change experienced by upregulated genes in response to E2 is greater in magnitude than the fold change experienced by downregulated genes (box-and-whisker plot). c Western blot of TDG and ER levels after treatment with scrambled siRNA (siControl) or siRNA targeting TDG (siTDG) (left panels). d To determine whether TDG was important for transcriptional upregulation of these genes, siControl or siRNA targeting TDG was treated with 100 nM E2 for 1 h. Analysis of mRNA levels using qPCR revealed that loss of TDG decreases, and in some cases completely abrogate, E2-mediated transcription (n = 3, p value < 0.05). e Comparison of E2-mediated TDG binding at genes which also experience the greatest increase in E2-mediated transcription (Spearman coefficient shown) Knockdown validation info.

3 References

Western Blot (2)

Epigenetics & chromatin

Genome-wide analysis reveals a role for TDG in estrogen receptor-mediated enhancer RNA transcription and 3-dimensional reorganization.

"Published figure using TDG polyclonal antibody (Product # PA5-29140) in Western Blot"

Authors: Kolendowski B, Hassan H, Krstic M, Isovich M, Thillainadesan G, Chambers AF, Tuck AB, Torchia J

Species

Not Applicable

Dilution

Not Cited

Year

2018

The Journal of biological chemistry

Excision of uracil from transcribed DNA negatively affects gene expression.

"Published figure using TDG polyclonal antibody (Product # PA5-29140) in Western Blot"

Authors: Lühnsdorf B, Epe B, Khobta A

Species

Not Applicable

Dilution

Not Cited

Year

2014

ChIP assay (1)

Epigenetics & chromatin

Genome-wide analysis reveals a role for TDG in estrogen receptor-mediated enhancer RNA transcription and 3-dimensional reorganization.

"Published figure using TDG polyclonal antibody (Product # PA5-29140) in Western Blot"

Authors: Kolendowski B, Hassan H, Krstic M, Isovich M, Thillainadesan G, Chambers AF, Tuck AB, Torchia J

Species

Not Applicable

Dilution

Not Cited

Year

2018

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