

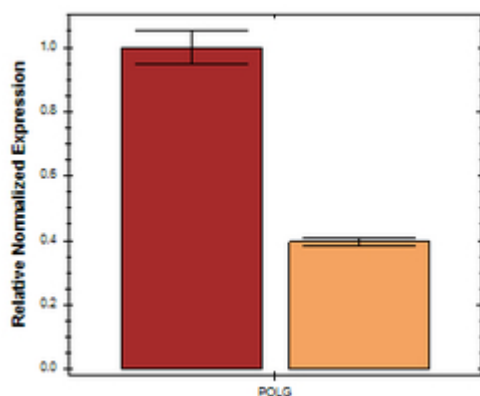
Product Data Sheet

Human POLG Knockdown HEK293T Cell Lysate

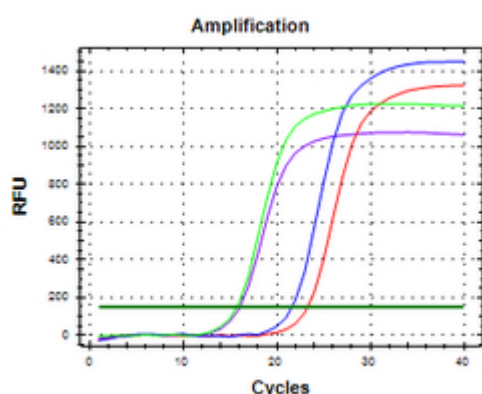
Catalog #	Source	Reactivity	Applications
CKD2202	HEK293T	Human	
Description	Human POLG knockdown HEK293T cell lysate is engineered by our optimized transduction of the specific shRNA.		
Form	Liquid in 50 mM Tris-HCl, 2% SDS, 10% glycerol, 100 mM DTT, 0.01% Bromophenol blue		
Gene Symbol	POLG		
Alternative Names	MDP1; POLG1; POLGA; DNA polymerase subunit gamma-1; Mitochondrial DNA polymerase catalytic subunit; PolG-alpha		
Entrez Gene	5428		
SwissProt	P54098		
KO/KD Validation	RT-qPCR		
Cell Line	HEK293T		
Components	Human POLG knockdown HEK293T cell lysate x 1 vial; shControl HEK293T cell lysate x 1 vial		
Directions for Use	Thaw the vial on ice or at room temperature. Mix gently by pipetting or brief vortexing. Briefly centrifuge to collect the sample. Load the desired amount of lysate directly onto an SDS-PAGE gel. Perform SDS-PAGE and Western blot analysis using standard laboratory protocols. Note: This lysate has been pre-denatured in SDS sample buffer containing DTT and does not require additional reducing agent or boiling before electrophoresis.		
Storage/Stability	Shipped at 4°C. Upon delivery aliquot and store at -80°C for one year. Avoid freeze/thaw cycles.		

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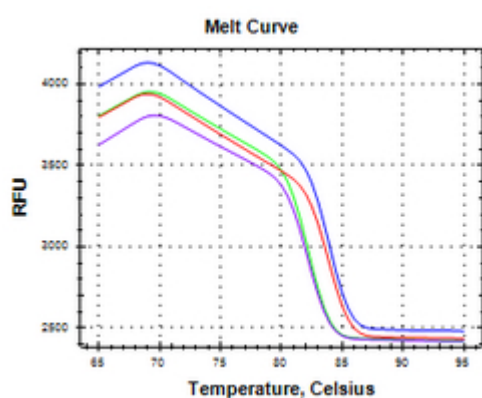
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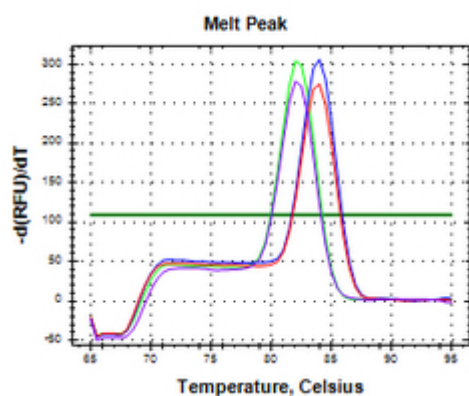
RT-qPCR analysis of POLG knockdown efficiency. Compared with the 293T shRNA control (left), POLG mRNA expression in the stable shRNA knockdown cell line (right) decreased, and the knockdown efficiency was 61%.



RT-qPCR amplification curves. The Ct values of the knockout sample significantly increased, confirming the effective knockdown of POLG mRNA. [Red curve (knockdown sample), Blue curve (shRNA control), Purple and Green curve (reference gene GAPDH)]



RT-qPCR melt curve analysis demonstrated highly specific PCR amplification product without detectable nonspecific amplification or primer-dimer formation. [Red curve (knockdown sample), Blue curve (shRNA control), Purple and Green curve (reference gene GAPDH)]



This picture presents the raw fluorescence data (relative fluorescence units, RFU) used to generate the melt curves. [Red curve (knockdown sample), Blue curve (shRNA control), Purple and Green curve (reference gene GAPDH)]

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