

**Table S1. Primers for quantitative real-time PCR.**

Genes	Sequence of the primer (5' to 3')
<i>PARP1-F</i>	CCACACACAATGCGTATGAC
<i>PARP1-R</i>	CCACAGCAATCTTCGGTTA
<i>XRCCI-F</i>	AACTCGTACCCCAGCCACA
<i>XRCCI-R</i>	AGCACCCTACCACACCCTG
<i>APEX1-F</i>	GATTAGATTGGGTAAAGGAAGAAGC
<i>APEX1-R</i>	AGTATTGATGAGAGAGTCCAGGCA
<i>FEN1-F</i>	TGCTAATGCGACACCTGACTG
<i>FEN1-R</i>	CCCAATACCCCGGATACTCT
<i>DNAIlgase1-F</i>	CTTTGTGGAGACAGAGGGGCG
<i>DNAIlgase1-R</i>	TCTCGTAGGTGGCATCAACATC
<i>DNAIlgase3-F</i>	GCTATGAAGGTGGGGGAG
<i>DNAIlgase3-R</i>	GTGGAGGGTGGCAAGTAAA
<i>POLB-F</i>	TAGCAAAAATACCCACACAAA
<i>POLB-R</i>	ATGGACCAATGCCACTAACT
<i>RPA1-F</i>	GGGAATGGGTTCTACTGTTT
<i>RPA1-R</i>	GTACGGATCTGACTTTTGTTG
<i>PALB2-F</i>	GTTCCGTAGATGTGAGTGCC
<i>PALB2-R</i>	TCTGCGAAGTGCCAGGTATA
<i>XPA-F</i>	TAACCAAAACAGAGGCAAAA
<i>XPA-R</i>	ACCCCAAACCTTCAAGAGACC
<i>MRE11-F</i>	TACGACTGCGAGTGGACTAT
<i>MRE11-R</i>	CTCTATGCCTGAAAAAATGG
<i>RAD51-F</i>	CTCGCTGATGAGTTTGGTGT
<i>RAD51-R</i>	CAGGGAGAGTCGTAGATTTTGC
<i>ATM-F</i>	ATTACGGGTGTTGAAGGTGT
<i>ATM-R</i>	TCATGGTCCAGTCAAAGAGT
<i>GAPDH-F</i>	CAGGAGGCATTGCTGATGAT
<i>GAPDH-R</i>	GAAGGCTGGGGCTCATT

**Table S2. Information of antibodies applied in immunohistochemistry (IHC), immunofluorescence (IF), co-immunoprecipitation (Co-IP) and western blotting (WB).**

Antibody	Sources	
pADPr, 1:100 (IF), 1:1000 (WB)	Santa Cruz	Cat# sc-56198
p-H2A.X (Ser139) 1:100 (IF), 1:1000 (WB)	CST	Cat# 9718
PARP1, 1:1000 (WB)	Abcam	Cat# ab194586
APEX1, 1:1000 (WB)	Abcam	Cat# ab92744
XRCC1, 1:1000 (WB)	Abcam	Cat# ab134056
LIG3, 1:500 (WB)	Proteintech	Cat# 26583-1-AP
p-ATM (Ser1981), 1:1000 (WB)	CST	Cat# 5883
p-CBK2 (Thr68), 1:1000 (WB)	CST	Cat# 2197
p-P53 (Ser15), 1:1000 (WB)	CST	Cat# 9286
BCL2, 1:2000 (WB)	Proteintech	Cat# 60178-1-Ig
BAX, 1:2000 (WB)	Proteintech	Cat# 60267-1-Ig
Cleaved caspase 3, 1:1000 (WB)	CST	Cat# 9661
Cleaved PARP, 1:1000 (WB)	CST	Cat# 5625
Cyclin A, 1:500 (WB)	Abcam	Cat# ab32498
CDK2, 1:500 (WB)	Proteintech	Cat# 60312-1-Ig
GAPDH, 1:3000 (WB)	Proteintech	Cat# 10494-1-AP
LMO2, 1:500 (WB)	Abcam	Cat# ab183328
LMO2, 1:100 (IHC)	Abcam	Cat# ab91652
LMO2, 5 µg per 1 mg protein (Co-IP)	Santa Cruz	Cat# sc-65736
53BP1, 1:1000 (WB)	Abcam	Cat# ab175933
53BP1, 5 µg per 1 mg protein (Co-IP)	Santa Cruz	Cat# sc-515841
Alexa Fluor 594-AffiniPure	Jackson	Cat# 805-587-008
Fab Fragment Bovine Anti-Goat IgG,	ImmunoResearch	
Fc Fragment Specific, 1:200 (IF)		
HRP-conjugated Affinipure	Proteintech	Cat No. SA00001-2
Goat Anti-Rabbit IgG (H+L), 1:5000 (WB)		
HRP-conjugated Affinipure	Proteintech	Cat No. SA00001-1
Goat Anti-Mouse IgG (H+L), 1:5000 (WB)		

**Table S3. The correlation between LMO2 expression and clinicopathologic features of 67 patients with NKTCL.**

<b>Variable</b>	<b>N</b>	<b>LMO2+</b>	<b>LMO2—</b>	<b>P value</b>
<b>Total</b>	67	22	45	
<b>Gender</b>				0.101
Male	54	15	39	
Female	13	7	6	
<b>Age(year)</b>				0.550
>60	16	4	12	
≤60	51	18	33	
<b>Ki-67</b>				0.253
≥50	58	21	37	
<50	9	1	8	
<b>EBER</b>				0.713
Negative	1	0	1	
Positive	66	22	44	
<b>LDH</b>				0.991
Normal	29	9	20	
Elevated	38	13	25	
<b>Stage</b>				<b>0.022*</b>
I+II	33	14	19	
III+IV	34	8	26	
<b>IPI score</b>				0.781
0-2	46	16	30	
3-5	21	6	15	

**EBER, Epstein-Barr virus encoding RNAs; LDH, lactate dehydrogenase; IPI, international prognostic index. \*P < 0.05.**