



# Caracterización funcional de la interacción de la proteína p53 con la ubiquitina ligasa HERC2

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## ***Listado de abreviaturas***

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53BP1: p53 binding protein 1  
AMPK: AMP activated protein kinase  
Apaf1: Apoptosis protease activating factor 1  
APC: Adenomatous polyposis coli  
ARC: Apoptosis repressor with caspase recruitment domain  
AS: Angelman syndrome  
Atg8: Autophagy-related protein 8  
ATM: Ataxia telangiectasia mutated  
ATP: Adenosine TriPhosphate  
ATR: Ataxia telangiectasia and Rad3 related  
Bak: Bcl2 antagonist/killer 1  
Bax: Bcl2-associated X protein  
BCA: Bicinchoninic acid assay  
Bcl-2: B-cell CLL/lymphoma 2  
Bid: BH3 interacting domain death agonist  
BRCA1: Breast cancer 1  
BSA: Bovine serum albumin  
CDC25A: Cell division cycle 25A  
CDK: Ciclin dependent kinase  
cDNA: Complementary DNA  
Ceb1: Cyclin E-binding protein-1  
CHC: Clathrin heavy chain  
Chk1: Checkpoint Kinase 1  
Chk2: Checkpoint Kinase 2  
CHX: Cicloheximida  
CK1  $\alpha$ : Casein kinase 1 $\alpha$   
COP1: Constitutive photomorphogenic protein  
CP110: Centriolar coiled coil protein  
CPH: CUL7, PARC, HERC2  
DBD: DNA binding domain  
DMEM: Dulbecco's Modified Eagle's medium

*Listado de abreviaturas*

DNA: Deoxyribonucleic acid  
DNA-PK: DNA-dependent protein kinase  
DTT: Dithiothreitol  
DYRK2: Tyrosine-phosphorylation-regulated kinase 2  
E6AP: E6 associated protein  
EDTA: Ethylenediaminetetraacetic acid  
EMT: Epithelial mesenchymal transition  
FAT10: HLA-F-adjacent transcript 10  
FGF: Fibroblast growth factor  
FHA: Forkhead associated domain  
Gadd45A: Growth arrest and DNA damage inducible alpha  
GAP: GTPase activator protein  
GAPDH: Glyceraldehyde 3-phosphate dehydrogenase  
GDP: Guanosine DiPhosphate  
GEF: Guanine nucleotide exchange factor  
GLUT1: Glucose transporter 1  
GST- $\alpha$ 1: Glutathione-S-transferase  $\alpha$ 1  
GTP: Guanosine TriPhosphate  
HAT: Histone acetyltransferases  
HAUSP: Herpesvirus associated ubiquitin specific protease  
HECT: Homologous to E6AP C-terminus  
HIPK2: Homeodomain interacting protein kinase 2  
HLTF: Helicase-like transcription factor  
hPLIC: Human proteins linking integrin-associated proteins and cytoskeleton  
HPV: Human papilloma virus  
IFN- $\alpha/\beta$ : Inteferon  $\alpha/\beta$   
IP: Inmunoprecipitación  
IRF3: Interferon Regulatory Factor 3  
IRF4: Interferon regulatory 4  
ISG15: Interferon induced gene  
jdf2: juvenile development and fertility 2

kDa: Kilodalton  
Killer/DR5: Death domain containing receptor  
LDS: Lithium dodecyl sulfate  
LPS: Lipopolisacárido  
MC1R: Melanocortin 1 receptor  
MDC1: Mediator of DNA damage checkpoint 1  
MDM2: Mouse double minute 2  
MET: Mesenchymal mesénquima-epitelio transition MET  
M-H: Mib-HERC2  
miRNAs : microRNAs  
MITF: Microphthalmia associated transcription factor  
MLH1: MutL homolog 1  
MRN: Mre11-Rad50-Nbs1  
mRNA: Messenger RNA  
MSH2: MutS homolog 2  
mTOR: Mammalian target of rapamycin  
MYBBP1A: Myb- binding protein 1A  
NES: Nuclear exportation signal/ sequence  
NEURL4: Neuralized homolog 4  
NF2: Neurofibromin 2  
NHEJ: Non homologous end joining  
NLS: Nuclear localization signal/sequence  
NQO1: NADPH quinone oxidoreductase  
NTF2: Nuclear transport factor 2  
p53AIP1: p53-regulated apoptosis inducing protein 1  
p53R2: Ribonucleotide reductase M2 B  
PAGE: Polyacrylamide gel electrophoresis  
PBS: Phosphate buffered saline  
PCAF: p300 and CBP associated factor  
PCNA: Proliferating celular antigen  
PCR: Polymerase chain reaction

PERP: TP53 apoptosis effector  
PI: Suero preinmune  
PIG3: p53 inducible gene 3  
PIG6: p53 inducible 6  
Pirh2: p53 induced protein with a RING-H2 domain  
PKC: Protein kinase C  
PMS2: Postmeiotic segregation increased 2  
PMSF: Phenylmethylsulfonyl fluoride  
PTEN: Phosphatase and tensin homolog  
PUMA: p53 upregulated modulator of apoptosis  
PWS: Prader-Willi syndrome  
Ran: Ras related nuclear protein  
RAP80: Receptor associated protein 80  
Rb: Retinoblastoma  
Rheb: Ras homolog enriched in brain  
RING: Really interesting new gene  
rjs: runty, jerky, sterile  
RLD: RCC1-like domain  
RNF168: Ring finger protein 168  
RNF8: Ring finger protein 8  
ROS: Reactive oxygen species  
RP: Ribosomal protein  
RPA: Replication protein A1  
rRNA: Ribosomal RNA  
SDS: Sodium dodecyl sulfate  
SH3: Src homology 3  
siRNA: Small interference RNA  
SLC24A4: Solute carrier family 24, member 4  
SMC1: Structural maintenance of chromosomes 1A  
Smyd2: SET and MYND domain containing 2  
SNP: single nucleotide polymorphism



SUMO: Small ubiquitin-like modifier  
TA : Transactivación  
TBST: Tris-Buffered Saline and Tween 20  
TFIIH: Transcription factor IIH  
TGF $\beta$ : Tumor growth factor  $\beta$ .  
TNF $\alpha$  : Tumor necrosis factor  $\alpha$   
TRAIL: TNF related apoptosis inducing ligand  
TSC1: Tuberous sclerosis 1  
TSC2: Tuberin  
TSP-1: Trombospondina  
TYRP1: Tyrosinase-related protein 1  
UV: Ultravioleta  
VEGF: Vascular endothelial growth factor  
x-CT: Subunit of the cystine/glutamate transporter),  
XPA: Xeroderma pigmentosum, complementation group A  
XPC: Xeroderma pigmentosum, complementation group C  
XPG: Xeroderma pigmentosum, complementation group G  
XPG-ERCC1: Excision repair cross-complementing rodent repair deficiency