

Oxidative Stress-Induced DNA Damage and Apoptosis in Multiple Cancer Cell Lines: Novel Anticancer Properties of Marine *Aspergillus oryzae* NGM91 Extract

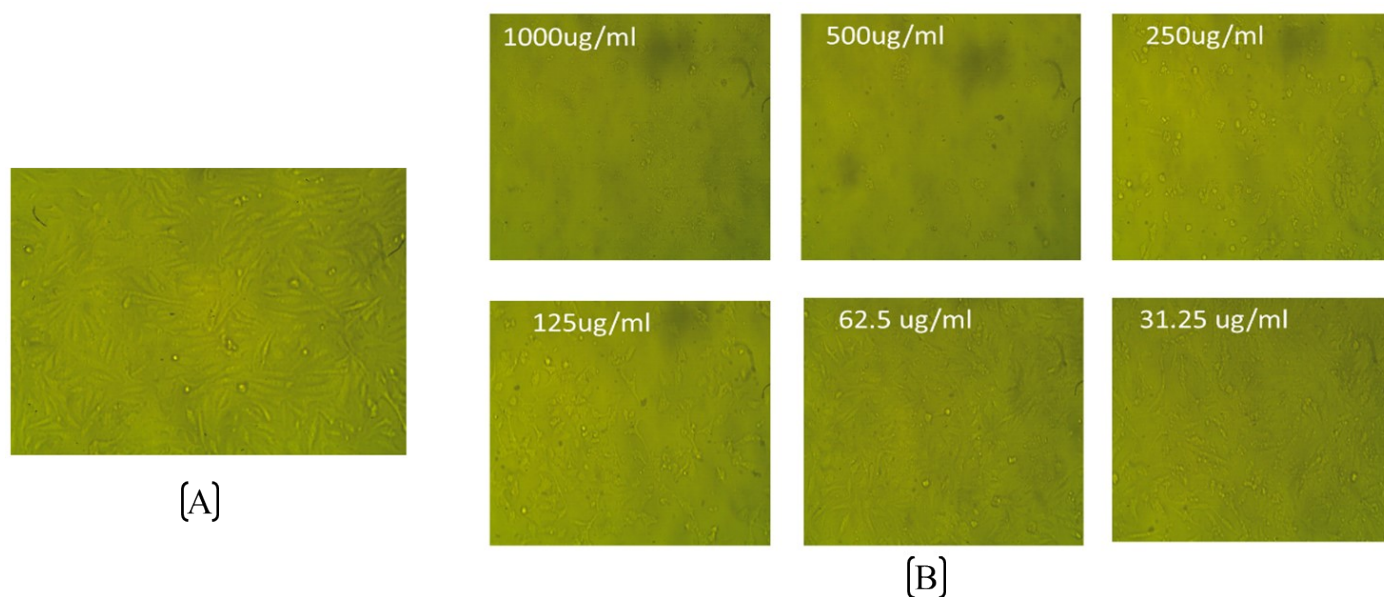


Figure S1. Morphology of WI-38 cells before and after *A. oryzae* NGM91 crude extract (A) Untreated control WI-38 cells (B) WI-38 cells treated with 31.25-1000 µg/mL fungal extract

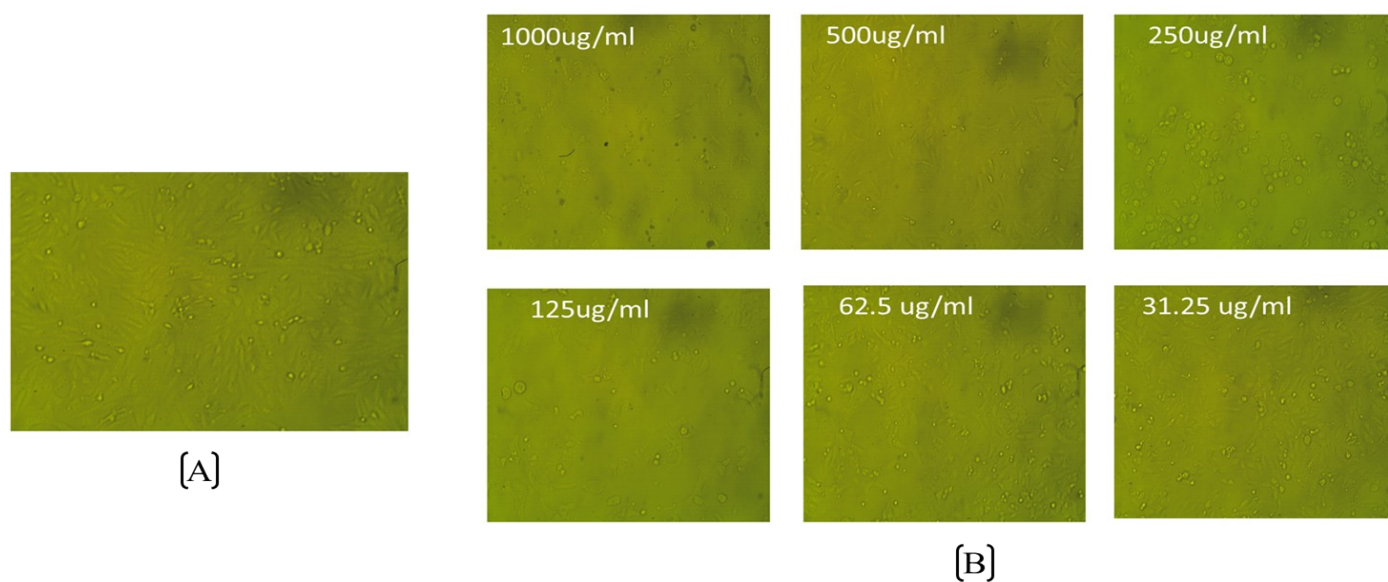


Figure S2. Morphology of Caco-2 cells before and after *A. oryzae* NGM91 crude extract treatment (A) Untreated control Caco-2 cells (B) Caco-2 cells treated with 31.25-1000 $\mu\text{g/mL}$ fungal extract

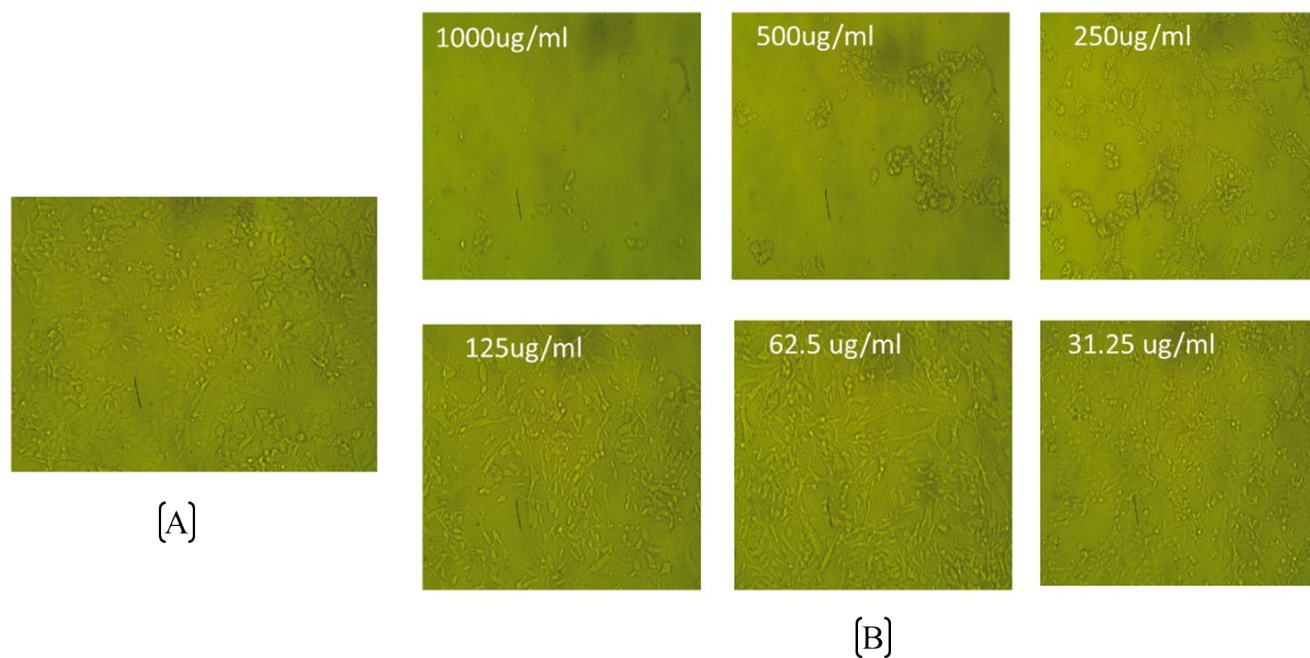


Figure S3. Morphology of HepG2 cells before and after *A. oryzae* NGM91 crude extract treatment (A) Untreated control HepG2 cells (B) HepG2 cells treated with 31.25-1000 $\mu\text{g/mL}$ fungal extract

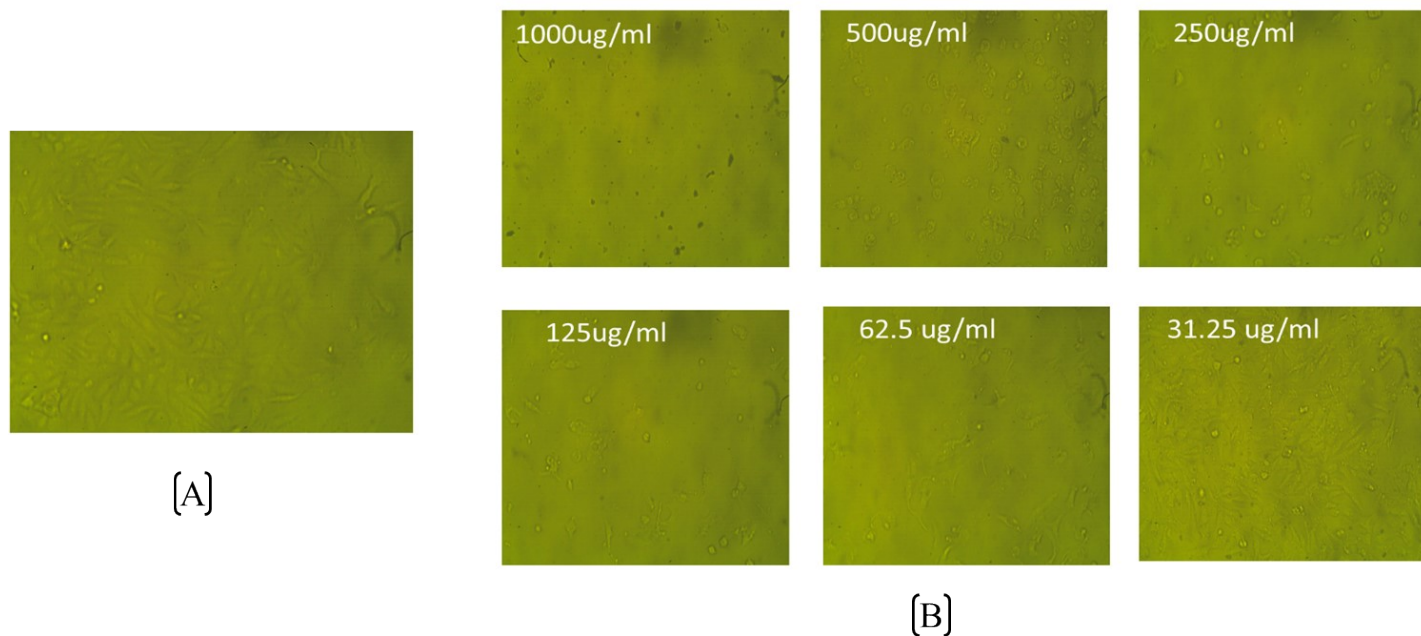


Figure S4. Morphology of Pc3 cells before and after *A. oryzae* NGM91 crude extract treatment (A) Untreated control Pc3 cells (B) Pc3 cells treated with 31.25-1000 $\mu\text{g}/\text{mL}$ fungal extract

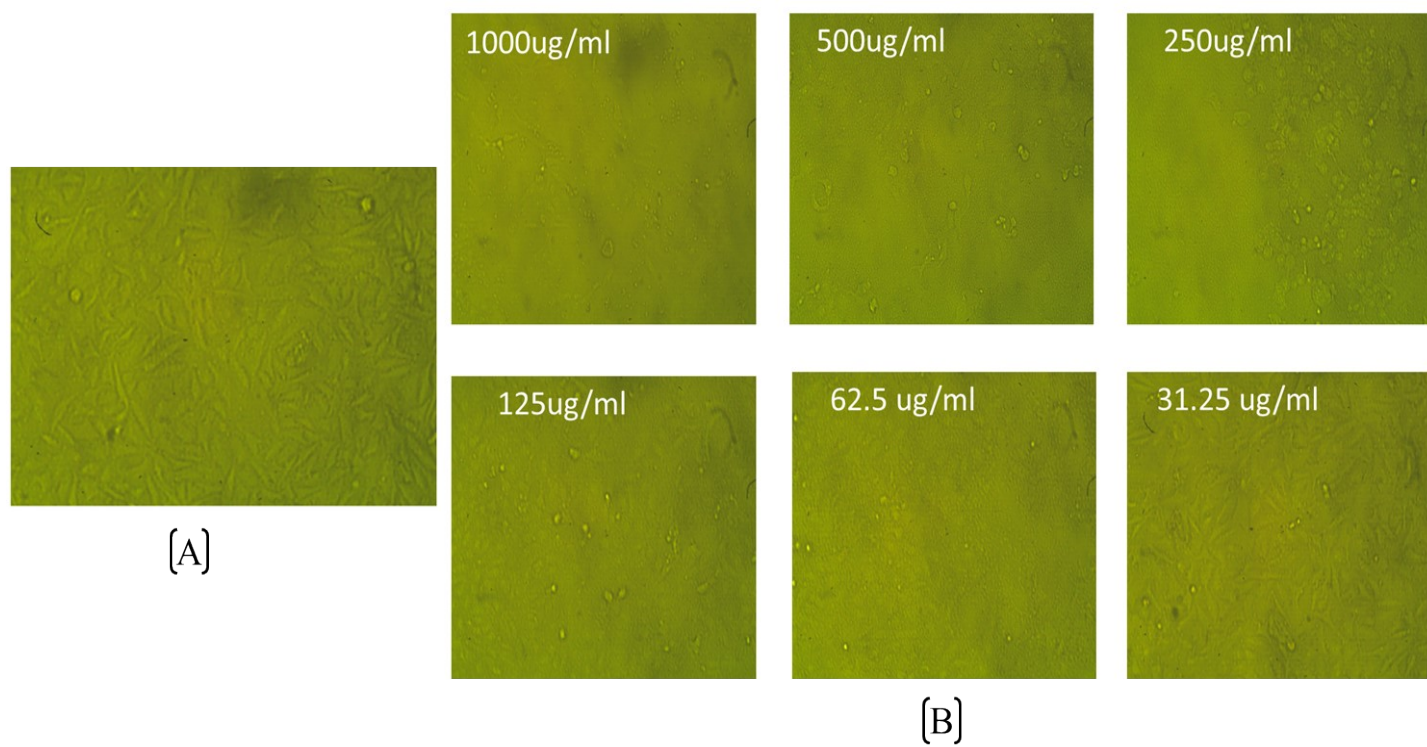


Figure S5. Morphology of PANC-1 cells before and after *A. oryzae* NGM91 crude extract treatment (A) Untreated control PANC-1 cells (B) PANC-1 cells treated with 31.25-1000 µg/mL fungal extract

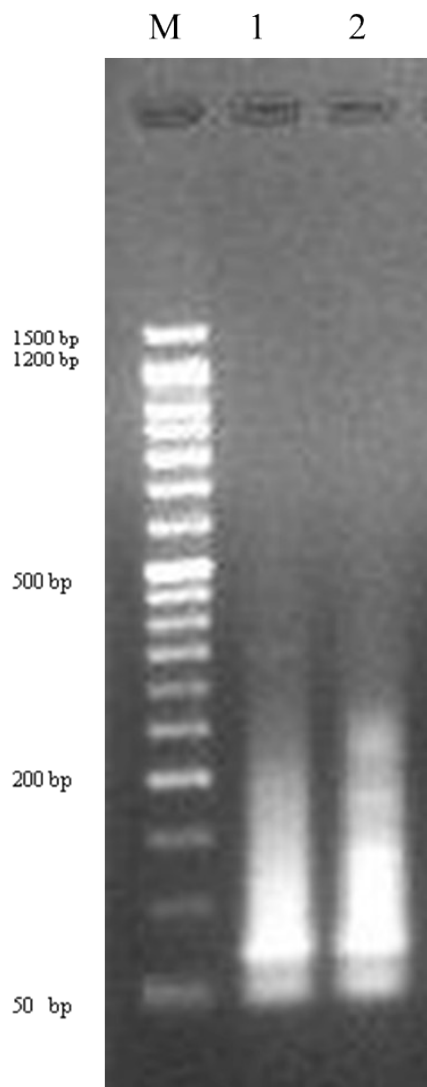


Figure S6. DNA fragmentation detected with Agarose gel in negative and treated prostate cancer cell lines. M: represents DNA marker, Lane 1: represents negative control of prostate cancer cell lines, Lane 2: represents treated prostate cancer cell lines.

Table S1: Primer's sequence used for *qRT-PCR* of PC3 cell lines

Gene	Primer sequence	GenBank (accession no)
CAT	F': GAG CCT ACG TCC TGA GTC TC	NM_001752.4

	R': ATC CCG GAT GCC ATA GTC AG	
SOD	F': GGA GAC TTG GGC AAT GTG AC R': CAC AAG CCA AAC GAC TTC CA	AY450286.1
GPX	F': TAA TGG AGC TGC ACT GGG AA R': CCT AAA GGG CAA GGG GAG AA	NM_001008397.4
GST	F': TGA TGT CCT TGA CCT CCA CC R': ATC TGA GCA TCC CTT AGC CC	M99422.1
Bcl-2	F': GCC TTC TTT GAG TTC GGT GG R': GAA ATC AAA CAG AGG CCG CA	EU287875.1
BAX	F': AAG AAG CTG AGC GAG TGT CT R': GTT CTG ATC AGT TCC GGC AC	L22473.1
P53	F': CAT CTG GCC TTG AAA CCA CC R': TGG GAT GGG GTG AGA TTT CC	AB082923.1
Caspase-3	F': ACT GGA CTG TGG CAT TGA GA R': GCA CAA AGC GAC TGG ATG AA	NM_004346.4
GAPDH	F': CCA AGG AGT AAG ACC CCT GG R': TGG TTG AGC ACA GGG TAC TT	NM_001256799.3

CAT: Catalase gene; SOD: Superoxide dismutase gene; GPx: Glutathione peroxidase gene; GST: Glutathione transferase gene; Bcl-2: B-cell lymphoma-2 gene; BAX: Bcl-2-associated X protein encoding gene; p53: tumor suppressor gene; GAPDH: Glyceraldehyde-3-phosphate dehydrogenase