بسم الله الرحمن الرحيم

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بقسم التوثيق الإلكتروني بمركز الشبكات وتكنولوجيا المعلومات دون أدنى مسئولية عن محتوى هذه الرسالة.

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Ain Shams University
Faculty of Women
For Arts, Science and Education

Assessment of the Anti-proliferative Capabilities of Probiotic Bacteria on some Malignant Cell Lines

A thesis

Submitted in partial fulfilment for a Master's degree in microbiology

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يَرْفَعِ اللَّهُ الَّذِينَ آمَنُوا مِنكُمْ وَالَّذِينَ أُوتُوا الْعِلْمَ دَرَجَاتٍ

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Dedication

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LIST OF ABBREVIATIONS

Abbreviation	The name
BC	**Breast cancer**
BD	***Bifidobacterium bifidium***
CACO	**Human colon cancer**
CCD	**Central Composite Design**
Chemo	**Chemotherapy**
CRC	**Colorectal cancer**
DMSO	**Di-methyl sulfoxide**
EPS	**Extra polysaccharides**
FBS	**Fetal bovine serum**
GIT	**Gastro intestinal tract**
LAB	**Lactic acid bacteria**
Lb.a	***Lactobacillus acidophilus***
Lb.c	***Lactobacillus casei***
LD	***Lactobacillus delbreuckii***
MCF7	**Human breast cancer**
miRNAs	**MicroRNAs**
MTT	**The 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyl-2H-tetrazolium bromide (MTT)**
NADH	**Nicotinamide adenine dinuleotide+hydroengen**
nsRNAs	**Non coding RNAs**
O. D	**Optical density**
PB	**Placket-Burman**
Pbs	**Phosphate buffered saline**
PCR	**Polymerase Chain Reaction**
PI	**Propidium iodide**

RB1	**Retinoblastoma**
RPM	**Rotation per minute**
RSM	**Response surface Methodology**
SOD	**Superoxide dismutase**
TLR	**Toll-like receptor**
TnTs	**Tunneling nanotubes**
WHO	**World Health Organization**