

## In Vitro Site specific DNA Editing Via Restriction Enzyme

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### Abstract

The most important gift your mother and father ever gave you was the two sets of 3 billion letter of DNA but like anything 3 billion components that gift is fragile. Sunlight, Smoking, unhealthy eating even spontaneous mistake by your cell all cause changes to your genome. There are different types of technique to recover to your genome one of the immortal technique is CRISPR cas9 is a tool for cutting DNA research. There are two main parts of CRISPR cas9 system a DNA cutting protein called cas9 protein and guideRNA bound together and form a complex that can identify and cut the specific section of DNA. Restriction digestion is a process in which DNA is a cut at a specific site the main and most important powerful property of Restriction enzyme is they can bind and cut only the double stranded DNA. If we have a DNA having particular site or gene is cover with short fragment of the DNA the particular restriction enzyme according to the gene sequence act only the short fragment of the DNA and created a break at the place of interest. There are two components of in-vitro site specific DNA editing system a DNA cutting enzyme called Restriction enzyme and short fragment of the DNA know as guided that can identify the double stranded DNA and cut specific section of the DNA

### Biograph :

He is Pakistan's first scientist has been awarded as per title at a young age. Umair Masood age is 23 years old; his birthplace is Rawalpindi Pakistan. British Broadcasting Cooperation has awarded him this award. He has been awarded by two scientific investigations Lab

root. Umair Masood Scientist is studying abroad has reached in 4th semester of subject Biotechnology. He is studying at Comcast University. Scientist Umair Masood belongs to Abbottabad Pakistan. He has nationality in Pakistan.