Hyperactive pG/pA-Tn5 Transposon for Illumina (4 μM)

Catalog# S612 / S613

Version 9.1

Vazyme biotech co., ltd.

01/ Introduction

Hyperactive pG/pA-Tn5 Transposon is specifically designed for Cleavage Under Targets and Tagmentation (CUT&Tag) technology which is a new method for research on protein-genomic interaction.

Hyperactive pG/pA -Tn5 Transposon is pre-loaded with Adapter, also is the fusion of Protein G with engineered ultra – active Tn5 transposase to form a novel dual-function fusion enzyme (Hyperactive pG/pA-Tn5 Transposase). It precisely binds the DNA sequence near the target protein under the antibody guidance and results in factor-targeted tagmentation, generating fragments used for PCR enrichment or DNA sequencing.

Compared with the traditional protein-genomic interaction research method of ChIP-Seq, CUT&Tag has significant advantages of low cell input, short operation time, high signal-to-noise ratio, good repeatability and is especially suitable for research on early embryo development, stem cells, tumors, and epigenetics.

02/ Components

Components	S612-01/02 10/20 μg	S613-01/02 10/20 μg
Hyperactive pG-Tn5 Transposon for Illumina (4 μM)	37.5 μl / 75 μl	/
Hyperactive pA-Tn5 Transposon for Illumina (4 μM)	/	37.5 μl / 75 μl
5x Tagment Buffer L*	200 μl / 400 μl	200 μl / 400 μl

5 × Tagment Buffer L contains Mg2+, which is used to test the effect of the DNA fragmentation by prepared transposon. It is not CUT&Tag working Buffer.

03/ Storage

Store at -30°C ~ -15°C and transporte at ≤0°C.

04/ Applications

This product is suitable for protein-DNA interaction research of mammalian cells, and the cell input is 60 - 100,000. It is also applicable to specially treated yeast and plant cells.

05/ Protocol

Please refer to Hyperactive In-Situ ChIP Library Prep Kit for Illumina (Catalog# TD901/TD902) or *Kaya-Okur H S, Wu S J, Codomo C A, et al. CUT&Tag for efficient epigenomic profiling of small samples and single cells[J]. Nature communications, 2019, 10(1): 1930.*