

Certificate of Analysis (CoA)

1. Product Information

| | | | |
|------------------------|--|--------------------------|---------------|
| Description | KeyTec® FLT3-ITD, N-GST; C-His | | |
| CAT. | P1HI0146S/P1HI0146L | Size | 10 µg/ 100 µg |
| LOT. | ABW01SA | Storage Condition | -80 °C |
| Validity Period | Up to 1 year from date of receipt, when stored and handled as recommended. And avoid repeated freeze-thaws cycles. | | |

2. Protein description

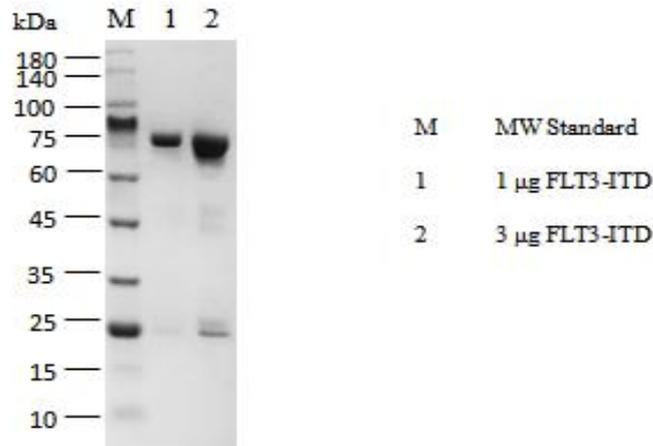
The KeyTec® FLT3-ITD, N-GST; C-His recombinant protein with N-terminal GST tag and C-terminal 6xHis tag, was purified by GST affinity purification and further purification via Ni-NTA affinity chromatography. The FLT3-ITD protein showed high activity in TR-FRET assay.

3. Physical Characteristics

| | |
|------------------------------|--|
| AA Sequences | Uniprot: P36888-1, R571-S993 |
| Tag | N-terminal GST tag, C-terminal 6x His tag |
| Molecular Weight | 77.8kDa |
| Species | Human |
| Expression Host | <i>Sf9</i> |
| Protein Concentration | 0.42mg/mL by OD ₂₈₀ |
| Purity | > 95% by SDS-PAGE |
| Form | Liquid |
| Formulation | 50 mM Tris, 150 mM NaCl, 1 mM DTT, 10% Glycerol, 0.05% Brij35, pH7.5 |

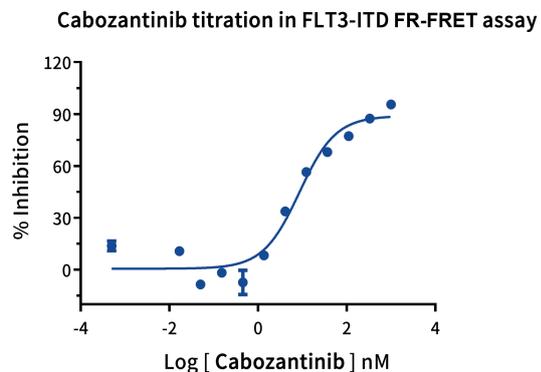
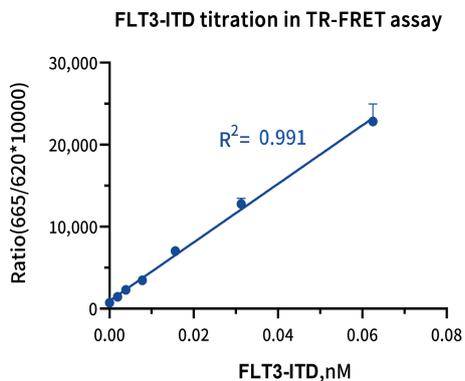
4. Quality Control

A: SDS-PAGE



B: FLT3-ITD titration

This FLT3-ITD recombinant protein was verified using the TR-FRET assay and showed high enzymatic activity. The enzymatic reaction was performed by incubating FLT3-ITD protein, ATP and substrate at 25 °C for 60 minutes, followed by the addition of TR - FRET reagents and a further 60 minutes incubation at 25 °C. Finally, the 665/620 nm ratio was measured using the TR-FRET module of a microplate reader.



5. Primary Sequence

| Primary Sequence for FLT3-ITD | | | | | | | |
|--|------------|------------|-------------|------------|-------------|------------|-----|
| Green: GST; Red: 3C; Orange: 6x His; Black: FLT3-ITD | | | | | | | |
| 1 | MSPILGYWKI | KGLVQPTRLL | LEYLEEKYEE | HLYERDEGDK | WRNKKFELGL | EFPNLPYYID | 60 |
| 61 | GDVKTLSMA | IIRYIADKHN | MLGGCPKERA | EISMLEGAVL | DIRYGVSRIA | YSKDFETLKV | 120 |
| 121 | DFLSKLPEML | KMFEDRLCHK | TYLNGDHVTH | PDFMLYDALD | VVLYMDPMCL | DAFPKLVCFK | 180 |
| 181 | KRIEAIQID | KYLKSSKYIA | WPLQGQWQATF | GGGDHPPKSD | GSLEVLFGP | GSRYESQLQM | 240 |
| 241 | VQVTGSSDNE | YFYVDFREYE | YDHVDFREYE | YDLKWEFPRE | NLEFGKVLGS | GAFGKVMNAT | 300 |
| 301 | AYGISKTGVS | IQVAVKMLKE | KADSSEREAL | MSELKMMTQL | GSHENIVNLL | GACTLSGPIY | 360 |
| 361 | LIFEYCCYGD | LLNYLRSKRE | KFHRTWTEIF | KEHNFSFYPT | FQSHPNSSMP | GSREVQIHPD | 420 |
| 421 | SDQISGLHGN | SFHSEDEIEY | ENQKRLEEEE | DLNVLTFFDL | LCFAYQVAKG | MEFLEFKSCV | 480 |
| 481 | HRDLAARNVL | VTHGKVVKIC | DFGLARDIMS | DSNYVVRGNA | RLPVKWMAPE | SLFEGIYTIK | 540 |
| 541 | SDVWSYGILL | WEIFSLGVNP | YPGIPVDANF | YKLIQNGFKM | DQPPFYATEEI | YIIMQSCWAF | 600 |
| 601 | DSRKRPSFPN | LTSFLGCQLA | DAEEAMYQNV | DGRVSECPHT | YQNRRPFSRE | MDLGLLSPQA | 660 |
| 661 | QVEDS | HHHHH | H | | | | 720 |