

# **EGFR DEL19-T790M-C797S/PC9**

## **CBP73212**

### **Contents**

I. Introduction.....	1
II. Background.....	1
III. Representative Data.....	2
1. WB of EGFR DEL19-T790M-C797S/PC9.....	2
2. Sanger of EGFR DEL19-T790M-C797S/PC9.....	2
3. Anti-proliferation assay .....	3



# EGFR DEL19-T790M-C797S/PC9

## CBP73212

### I. Introduction

Cell Line Name: EGFR DEL19-T790M-C797S/PC9

Host Cell: PC9

Stability: 16 passages (in-house test, that not means the cell line will be instable beyond the passages we tested.)

Application: Anti-proliferation assay and Cell-based kinase assay

Freeze Medium: 90% FBS+10% DMSO

Complete Culture Medium: RPMI-1640+10%FBS+2ug/ml puromycin

Mycoplasma Status: Negative

### II. Background

EGFR is widely recognized for its importance in cancer. Amplification and mutations have been shown to be driving events in many cancer types. Its role in non-small cell lung cancer, glioblastoma and basal-like breast cancers has spurred many research and drug development efforts.

Tyrosine kinase inhibitors have shown efficacy in EGFR amplified tumors, most notably gefitinib and erlotinib. Mutations in EGFR have been shown to confer resistance to these drugs, particularly the variant T790M, which has been functionally characterized as a resistance marker for both of these drugs. The later generation TKI's have seen some success in treating these resistant cases, and targeted sequencing of the EGFR locus has become a common practice in treatment of non-small cell lung cancer. Overproduction of ligands is another possible mechanism of activation of

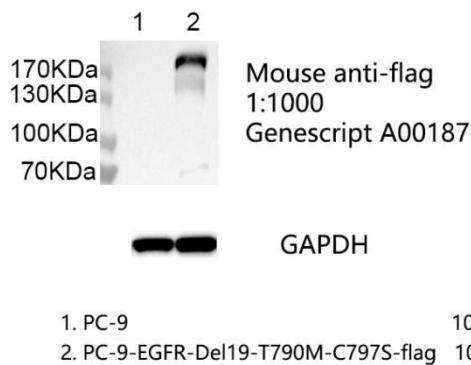


EGFR. ERBB ligands include EGF, TGF- $\alpha$ , AREG, EPG, BTC, HB-EGF, EPR and NRG1-4 (for detailed information please refer to the respective ligand section). In ligand-activated cancers, Cetuximab appears to be more effective than tyrosine-kinase inhibitors.

### III. Representative Data

#### 1. WB of EGFR DEL19-T790M-C797S/PC9 expression

PC-9-EGFR-Del19-T790M-C797S-flag WB data



#### 2. Sanger of EGFR DEL19-T790M-C797S/PC9

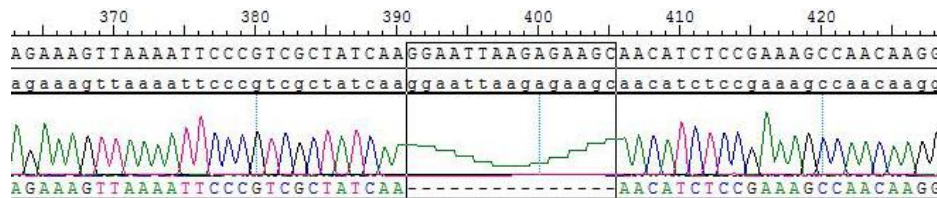


Figure 2. EGFR DEL19-T790M-C797S/PC9 19del

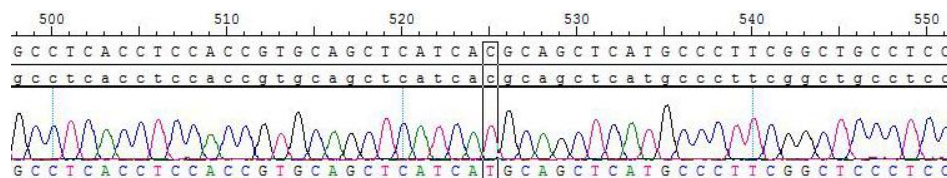


Figure 3. EGFR DEL19-T790M-C797S/PC9 T790M



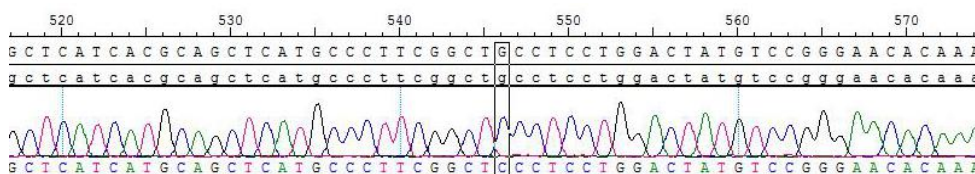
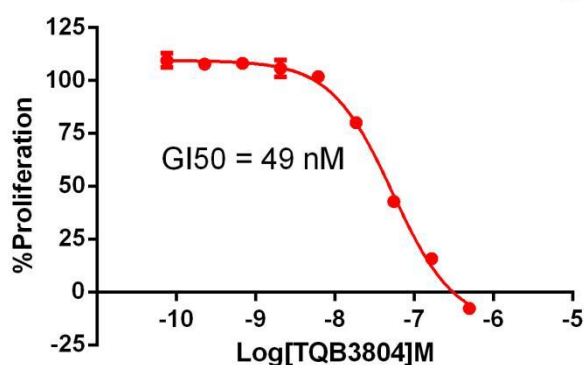


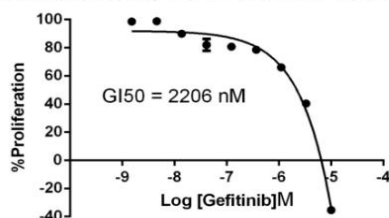
Figure 4. EGFR DEL19-T790M-C797S/PC9 C797S

### 3. Anti-proliferation assay

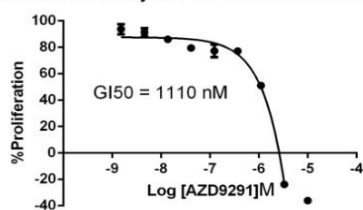
#### CTG Assay for PC9 EGFR DEL19/T790M/C797S Flag Cells Proliferation



#### CCK8 Proliferation Assay of PC9 DEL19/T790M/C797S Flag cells



#### CCK8 Proliferation Assay of PC9 DEL19/T790M/C797S Flag cells



Compound	GI50(nM)
TQB3804	49
Gefitinib	2206
AZD9291	1110

Figure 5. Anti-proliferation assay of three reference compounds on the CCK8 Proliferation Assay of EGFR DEL19-T790M-C797S/PC9 cells Line.

