

Cetuximab

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|-------------------------|--------------|
| #Cat: NB-64-46180-1mg | Size: 1 mg |
| #Cat: NB-64-46180-2mg | Size: 2 mg |
| #Cat: NB-64-46180-5mg | Size: 5 mg |
| #Cat: NB-64-46180-10mg | Size: 10 mg |
| #Cat: NB-64-46180-25mg | Size: 25 mg |
| #Cat: NB-64-46180-50mg | Size: 50 mg |
| #Cat: NB-64-46180-100mg | Size: 100 mg |

Chemical Properties:

CAS No: 205923-56-4

Formula:

Molecular Weight: 152 kDa

Appearance: no data available

Storage: store at low temperature
store at -20°C

Cetuximab

Biological Description:

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|-----------------------|--|
| Description | Cetuximab (C225) is a monoclonal antibody that is an inhibitor of human epidermal growth factor receptor (EGFR) (Kd=0.201 nM). Cetuximab has antitumor activity, inhibiting tumor cell proliferation and inducing apoptosis. |
| Targets (IC50) | EGFR |
| In vitro | <p>METHODS: Human squamous cell carcinoma (SCC) cells SCC-13Y, SCC-38, SCC-1, and SCC-11B were treated with Cetuximab (30 nM) for 8 days, and cell numbers were measured using a hemacytometer. RESULTS: Cetuximab inhibited cell proliferation of SCC cells in a time-dependent manner. Cetuximab inhibited the growth of SCC cell lines in a time-dependent manner, ranging from 20%-75% compared to untreated controls. [1] METHODS: EGFR mutant cells PC-9 and EGFR wild-type cells PC-14, A549 were treated with Cetuximab (10-100 µg/mL) for 24 h, and the expression levels of target proteins were detected by Western Blot. RESULTS: EGFR phosphorylation was strongly expressed in PC-9 and continued to be strongly expressed during Cetuximab treatment. In PC-14 and A549 cells, although the increase in EGFR phosphorylation was reduced by the addition of Cetuximab, phosphorylation was not completely inhibited at the highest concentration. [2]</p> |
| In vivo | <p>METHODS: To assay antitumor activity in vivo, Cetuximab (1 mg/injection) was administered intraperitoneally to BALB/c (nu/nu) mice harboring HNSCC tumors UT-SCC2 or UT-SCC-14 on the 10th, 13th, and 16th days after tumor cell injection. RESULTS: Cetuximab treatment reduced tumor growth in HNSCC xenografts and increased local oxygen partial pressure in tumors. [3] METHODS: To study in vivo antitumor activity, Cetuximab (0.25-1 mg/mouse) was administered intraperitoneally to nude mice bearing xenograft tumors every three days for a minimum of five injections. RESULTS: Treatment with Cetuximab alone effectively delayed the growth of GEO and L2987 tumors for at least 10 days. Borderline activity was observed in A549 and WiDr xenografts. However, Cetuximab did not show any significant anti-tumor activity in HT29, HCT116, LOVO, Colo205, LX-1, HCC70 and N87 models. [4]</p> |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|-----------|-----------|-----------|
| 1 mM | 0.0066 mL | 0.0329 mL | 0.0658 mL |
| 5 mM | 0.0013 mL | 0.0066 mL | 0.0132 mL |
| 10 mM | 0.0007 mL | 0.0033 mL | 0.0066 mL |
| 50 mM | 0.0001 mL | 0.0007mL | 0.0013 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.