



KOHAT UNIVERSITY OF SCIENCE & TECHNOLOGY

GRADUATE ADMISSIONS (Fall-2013)

The Kohat University of Science & Technology invites applications for admissions to MBA (1.5 Year), MBA (2.5 Year), MPhil/MS and PhD programmes in various disciplines as per following details:

Programme	Discipline	Eligibility
MBA (1.5 Year)	Management Sciences	BBA (4-Years) with at least CGPA of 2.50 on the scale of 4.00 from HEC recognized University/ Degree Awarding Institution.
MBA (2.5 Year)	Management Sciences	MA/MSc/MBBS/BS/BE or Equivalent Non-Business Degree with 1 st division or CGPA of 2.50 on the scale of 4.00 from HEC recognized University/ Degree Awarding Institution.
MS	Management Sciences	BBA(Hons)/BCom(Hons)/BPA(Hons)/ MBA/MCom/MPA with 1 st division or CGPA of 2.50 on the scale of 4.00 or CGPA 3.00 on the scale of 5.00 from HEC recognized university/Degree Awarding Institution
MPhil/MS	- Chemistry - Zoology - Botany - Mathematics - Microbiology - Biotechnology & Genetic Engineering - Computer Science - Education - Social Work - Sociology	Master Degree/Bachelor Degree (04 year) in relevant discipline with 1 st division or CGPA of 2.50 on the scale of 4.00 or CGPA 3.00 on the scale of 5.00 from HEC recognized University/Degree Awarding Institution
PhD	- Chemistry - Zoology - Botany - Biotechnology & Genetic Engineering - Mathematics - Computer Science - Management Sciences - Education	MPhil/MS/Equivalent Degree (18 year education) in the relevant discipline with 1 st division or CGPA of 3.00 on the scale of 4.00 from HEC recognized University/Degree Awarding Institution

Note

- For admission to MBA, MPhil/MS Programmes, the candidates must not have less than 45% marks in any examination
- For admission to MBA, MPhil/MS Programmes, the candidates must have passed GAT-(General)/ Equivalent conducted by NTS with at least 50% score.
- For admission to PhD Programmes, the candidates must have passed International GRE (subject) with minimum 60% percentile score or GAT-Subject (NTS) with minimum 60% cumulative score.

For admission to **PhD in Biotechnology & GE**, a Test will be conducted by the Departmental Committee on 26th September, 2013 and the qualifying score shall be 70%.

Instructions

- Prospectus and Admission Forms can be obtained free of cost from the Directorate of Academics and the Admission Form can also be downloaded from KUST website: www.kust.edu.pk.
- Admission Form must be supported by the following documents:
 - Application processing fee of Rs.1,000/- deposited in KUST account in HBL KUST Branch or a Bank Draft of Rs. 1,000/- in favor of Director Finance KUST.
 - Attested photocopies of certificates and degrees of all examinations passed.
 - Attested photocopy of the relevant result card valid up to the last date of Form submission
 - Attested photocopies of Domicile and National Identity Card
 - Attested 04 recent passport size photographs
 - A Research Proposal and two reference letters (for PhD only)
- The in-service candidates must submit Admission Forms through proper channel along with required documents including NOC from the parent departments. After the confirmation of admission, such candidates shall provide approval of study leave for the entire duration of the degree programme.
- All information will be displayed on the Notice Board of concerned department/ institute and will be uploaded on KUST website. No separate Call-letter will be issued for offer of admission, interview, and fee deposit.
- Admission Form other than the prescribed one/ not duly filled in/ not supported by the required documents/ without fee/ not received up to the last date of form submission, shall be rejected.
- Original documents shall be presented to the concerned Admission Committee at the time of interview.
- The University reserves the rights to withdraw the offer of admissions in any program without assigning any reason

Director Academics

Phone #: 0922-52914753, 52914724, 52914715

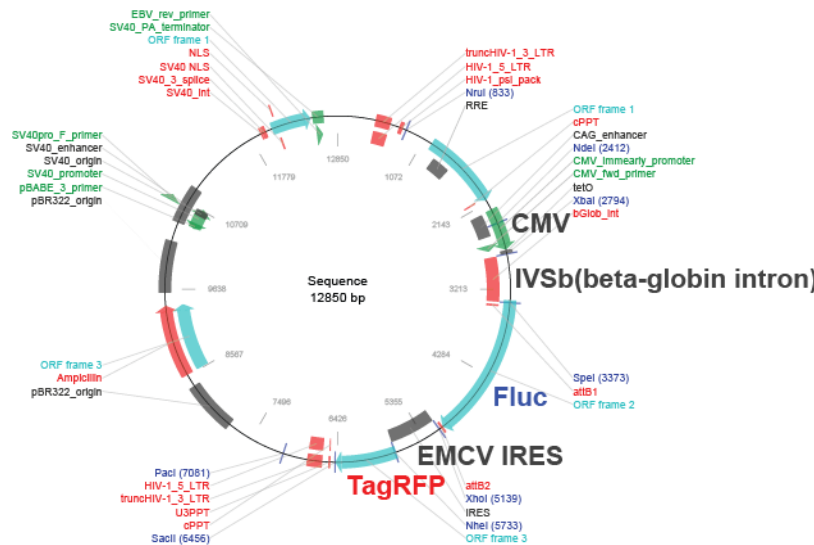
Schedule

Last date of Form submission: 1st October 2013

Interview : 3rd October 2013

Display of Merit List : 4th October 2013

pTRIP.CMV.IVSB.Fluc[ISG].ires.TagRFP



Clone information

Description

Bicistronic lentiviral vector for expressing a gene of interest (firefly luciferase, in this example) in the first cistron with TagRFP in the second cistron. This plasmid is derived from the parental DEST vector pTRIP.CMV.IVSB.ires.TagRFP-DEST. It was generated by performing an LR reaction with LR Clonase II (Invitrogen) and pENTR221.Fluc. This plasmid is used to generate lentivirus stocks in conjunction with pCMV-gag-pol and pCMV.VSVg.

NOTE: All ISG expressing plasmids have the same architecture as this Fluc expressing construct. An ISG expressing version can be generated in any plasmid software package by deleting the ORF for Fluc and replacing with the ORF for the ISG of interest.

Location of features

CMV promoter: 2411-2794

Beta globin intron: 2794-3373

Fluc: 3437-5089

EMCV IRES: 5147-5733

TagRFP: 5739-6452

Propagation in E. coli

Recommended host strains: MDS42Rec (from Scarab Genomics) or DH5 α

Resistance: ampicillin (100 μ g/ml)

Copy number: high

Lentivirus particle production

To generate lenti PP, three plasmids are needed: pTRIP, pCMV-VSVg, and pGag-pol.
For generating PP, The steps are as follows:

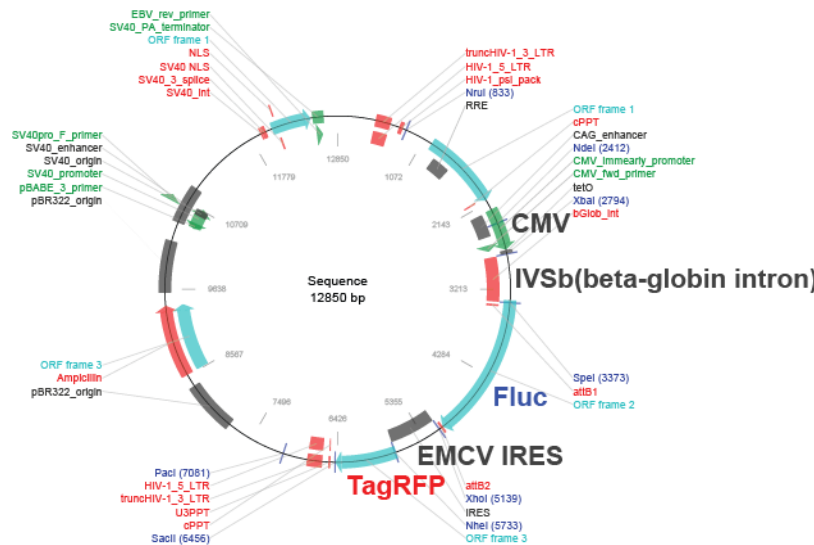
1. The day before transfection of DNA, split 293T and plate 400,000 cells/well on a 6 well plate that has been coated with poly-lysine.
2. The day of transfection, mix 6ul XtremeGene9 (Roche Cat# 06365809001) into 100ul Optimem (Invitrogen Cat# 51985-034) and let stand for 5 min...if there are many samples, a master mix can be made.
3. Aliquot DNAs into eppendorf tubes. The ratio of the plasmids for lentivirus production is:
pTRIP(GFP): 1.0ug
pCMV-VSVg: 0.2ug
pGag-pol: 0.8ug
4. Add 106 ul of the Optimem/XtremeGene9 mix to the DNA samples. Let this mix stand for at least 20 minutes at room temp.
5. During this 20min, change the media of the cells to DMEM (Invitrogen Cat#11995-065)/3%FCS/1%NEAA. Use 1.0ml media per well.
6. Add DNA mix to cells drop-wise and place back in incubator. Swirl plate to mix. 6 hours post-transfection, change media to 1.5 ml DMEM/3%FCS/1%NEAA.
7. 48 hours post-transfection, gently harvest the media from the cells. Add 1.5ml of fresh media (DMEM/3%FCS/1%NEAA) to the cells. Place the snap-cap tubes in a rack in the 4C fridge until the next day.
9. The next day (at 72 hours), repeat the harvesting as above. To each prep, add HEPES to a final concentration of 20mM and polybrene to final concentration of 4ug/ul.
10. Spin the 5ml tubes containing the supernatant at 1500rpm (520G) for 5 min in the table-top centrifuge to pellet cell debris. Alternatively, samples can be passed through a 0.45um syringe filter. Aliquot the supernatant into desired volume. Store at -80C.

References

A diverse range of gene products are effectors of the type I interferon antiviral response.

Schoggins JW, Wilson SJ, Panis M, Murphy MY, Jones CT, Bieniasz P, Rice CM.
Nature. 2011 Apr 28;472(7344):481-5

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