

LIST OF FIGURES

Figure	Title	Page No.
1.1	BARRIERS TO THE EFFICIENT DELIVERY OF PEPTIDES AND PROTEINS TO THE LUNG	4
2.1	MECHANISM OF GENERATION OF FINE PARTICLES	28
3.1	STANDARD CURVE OF INSULIN BY HPLC METHOD	98
3.2	STANDARD CURVE OF CALCITONIN BY HPLC METHOD	99
4.1	PROFILES OF BLOOD GLUCOSE REDUCTION FOLLOWING SUBCUTANEOUS ADMINISTRATION	134
4.2	INFLUENCE OF pH ON BLOOD GLUCOSE REDUCTION-TIME PROFILE OF INTRATRACHEALLY ADMINISTERED INSULIN CALCULATED FOR THE DOSE OF 3.0 IU/Kg.	135
4.3	EFFECTS OF PENETRATION ENHANCERS AND PROTEASE INHIBITORS ON BLOOD GLUCOSE REDUCTION-TIME PROFILE OF INTRATRACHEALLY ADMINISTERED INSULIN CALCULATED FOR THE DOSE OF 1.0 IU/Kg	136
4.4	PROFILES OF BLOOD GLUCOSE REDUCTION FOLLOWING INTRATRACHEAL ADMINISTRATION OF 1.0 IU/Kg INSULIN WITH COMBINATIONS OF ABSORPTION PROMOTERS	137
4.5	PROFILES OF BLOOD CALCIUM REDUCTION IN RATS FOLLOWING SUBCUTANEOUS ADMINISTRATION OF DIFFERENT DOSES OF CALCITONIN IN RATS	138
4.6	INFLUENCE OF pH ON BLOOD CALCIUM REDUCTION-TIME PROFILE OF INTRATRACHEALLY ADMINISTERED CALCITONIN CALCULATED FOR THE DOSE OF 3.0 IU/Kg.	139

Figure	Title	Page No.
4.7	EFFECT OF PENETRATION ENHANCERS AND THEIR COMBINATIONS ON BLOOD CALCIUM REDUCTION-TIME PROFILE OF INTRATRACHEALLY ADMINISTERED CALCITONIN CALCULATED FOR THE DOSE OF 3.0 IU/Kg	140-41
4.8	EFFECT OF PROTEASE INHIBITORS, THEIR COMBINATIONS AND COMBINATION OF PENETRATION ENHANCERS WITH PROTEASE INHIBITORS ON BLOOD CALCIUM REDUCTION-TIME PROFILE OF INTRATRACHEALLY ADMINISTERED CALCITONIN CALCULATED FOR THE DOSE OF 3.0 IU/Kg	142-43
5.1	<i>IN VITRO</i> PERMEATION APPARATUS	161
5.2	<i>IN VITRO</i> CUMULATIVE PERCENT PERMEATION OF INSULIN THROUGH THE ALVEOLAR MEMBRANE OF THE FROG LUNG	162
5.3	<i>IN VITRO</i> CUMULATIVE PERCENT PERMEATION OF CALCITONIN THROUGH THE ALVEOLAR MEMBRANE OF THE FROG LUNG	163
5.4	PROFILES OF CORRELATION BETWEEN <i>IN VITRO</i> INSULIN PERMEATION IN FROG ALVEOLAR MEMBRANE AND <i>IN VIVO</i> ABSORPTION IN RAT LUNG PROFILES OF CORRELATION BETWEEN <i>IN VITRO</i>	164-68
5.5	INSULIN PERMEATION IN FROG ALVEOLAR MEMBRANE AND <i>IN VIVO</i> ABSORPTION IN RAT LUNG	169-73
6.1	TWIN STAGE IMPINGER	199
6.2	DEPOSITION OF INSULIN ON LOWER STAGE OF TWIN STAGE IMPINGER WITH DIFFERENT CARRIERS AT VARIOUS FLOW RATES	200

Figure	Title	Page No.
6.3	DEPOSITION OF LACTOSE ON LOWER STAGE OF TWIN STAGE IMPINGER WITH DIFFERENT CARRIERS AT VARIOUS FLOW RATES	201
6.4	DEPOSITION OF CALCITONIN ON LOWER STAGE OF TWIN STAGE IMPINGER WITH DIFFERENT CARRIERS AT VARIOUS FLOW RATES	202