```
% plot X/Rt vs 2L/Kd
 kxrt = 10^-2; % 1, 10^2
 TwoL_Kd = 10^-3:10^3;
      X_Rt = 0.5*kxrt*Twol_Kd*((((1+Twol_Kd)/(2*kxrt*Twol_Kd))*(-1+(((1+4*kxrt*Twol_Kd)/((1+Twol_Kd)))*(-1+(((1+4*kxrt*Twol_Kd)/((1+Twol_Kd)))*(-1+(((1+4*kxrt*Twol_Kd)))*(-1+(((1+4*kxrt*Twol_Kd)))*(-1+(((1+4*kxrt*Twol_Kd)))*(-1+(((1+4*kxrt*Twol_Kd)))*(-1+(((1+4*kxrt*Twol_Kd)))*(-1+(((1+4*kxrt*Twol_Kd)))*(-1+(((1+4*kxrt*Twol_Kd)))*(-1+(((1+4*kxrt*Twol_Kd)))*(-1+(((1+4*kxrt*Twol_Kd)))*(-1+(((1+4*kxrt*Twol_Kd)))*((((1+4*kxrt*Twol_Kd)))*(-1+(((1+4*kxrt*Twol_Kd))))*(-1+(((1+4*kxrt*Twol_Kd)))*(-1+(((1+4*kxrt*Twol_Kd)))*(-1+(((1+4*kxrt*Twol_Kd))))*(-1+(((1+4*kxrt*Twol_Kd)))*(-1+(((1+4*kxrt*Twol_Kd)))*(-1+(((1+4*kxrt*Twol_Kd))))*(-1+(((1+4*kxrt*Twol_Kd))))*(-1+(((1+4*kxrt*Twol_Kd))))*(-1+(((1+4*kxrt*Twol_Kd))))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+((1+4*kxrt*Twol_Kd)))*(-1+(
 Kd).^2)).^0.5))).^2);
 semilogx(TwoL_Kd, X_Rt);
hold on;
 kxrt = 1;
      X_Rt = 0.5*kxrt*TwoL_Kd*((((1+TwoL_Kd)/(2*kxrt*TwoL_Kd))*(-1+(((1+4*kxrt*TwoL_Kd)/((1+TwoL_Kd)))*(-1+(((1+4*kxrt*TwoL_Kd)))*(-1+(((1+4*kxrt*TwoL_Kd)))*(-1+(((1+4*kxrt*TwoL_Kd)))*(-1+(((1+4*kxrt*TwoL_Kd)))*(-1+(((1+4*kxrt*TwoL_Kd)))*(-1+(((1+4*kxrt*TwoL_Kd)))*(-1+(((1+4*kxrt*TwoL_Kd)))*(-1+(((1+4*kxrt*TwoL_Kd)))*(-1+(((1+4*kxrt*TwoL_Kd)))*(-1+(((1+4*kxrt*TwoL_Kd)))*(-1+(((1+4*kxrt*TwoL_Kd)))*(-1+(((1+4*kxrt*TwoL_Kd)))*(-1+(((1+4*kxrt*TwoL_Kd))))*(-1+(((1+4*kxrt*TwoL_Kd)))*(-1+(((1+4*kxrt*TwoL_Kd)))*(-1+(((1+4*kxrt*TwoL_Kd))))*(-1+(((1+4*kxrt*TwoL_Kd)))*(-1+(((1+4*kxrt*TwoL_Kd)))*(-1+(((1+4*kxrt*TwoL_Kd))))*(-1+(((1+4*kxrt*TwoL_Kd)))*(-1+(((1+4*kxrt*TwoL_Kd))))*(-1+(((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*TwoL_Kd)))*(-1+((1+4*kxrt*Tw
 _{\text{Kd}}).^2)).^0.5))).^2);
 semilogx(TwoL_Kd, X_Rt);
hold on;
 kxrt = 10^2;
 \texttt{X Rt} = 0.5 * \texttt{kxrt*Twol} \; \; \texttt{Kd*} \; (\; (\; (\; (\; 1 + \texttt{Twol} \; \; \texttt{Kd}) \, / \; (\; 2 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; * \; (-1 + (\; (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, / \; (\; 1 + \texttt{Twol} \; \; \texttt{Kd}) \; ) \; * \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, / \; (\; 1 + \texttt{Twol} \; \; \texttt{Kd}) \; ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, = \; (-1 + (\; 1 + 4 * \texttt{kxrt*Twol} \; \; \texttt{Kd}) \, ) \; = \; (-1 + (\; 1 + 4 * \texttt{k
 _{Kd).^2)).^0.5))).^2);
 semilogx(TwoL Kd, X Rt);
```

