RECOMBINANT CONSTRUCT BASED ASSAY FOR SCREENING DRUGS AGAINST HOST PROTEASES HELPING IN VIRUS ENTRY

- The proof-of-concept *in vitro* assay is based on a reporter based substrate having cellulose binding region at one end and a reporter protein on the other end.
- Host proteases cleave viral structural proteins and help in virus-receptor attachment and entry. Our assay can be used to screen potential antiviral candidate drugs that are targeted against the protease cleavage and thus in turn virus entry.
- There is no requirement of animal cell culture.
- The substrate used can be purified from bacterial source and thus is easy to make.
- The substrate carries hexa-histidine tag at one end for the purpose of protein purification
- The substrate contains sequence from SARS-CoV-2 spike protein. The sequence can be replaced by similar regions from structural proteins of other viruses and thus may be modified and used for multiple viruses using similar entry mechanisms

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ASSAY DETAILS