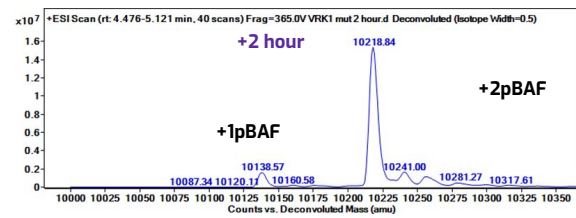
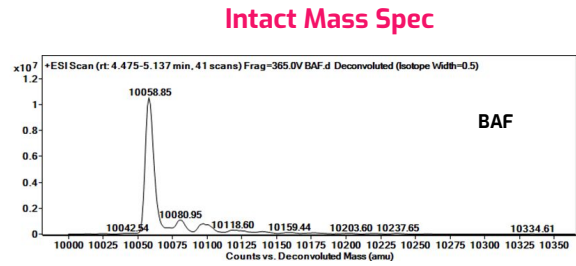
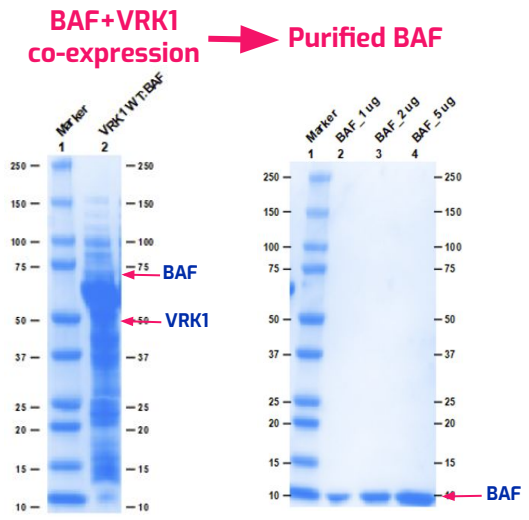
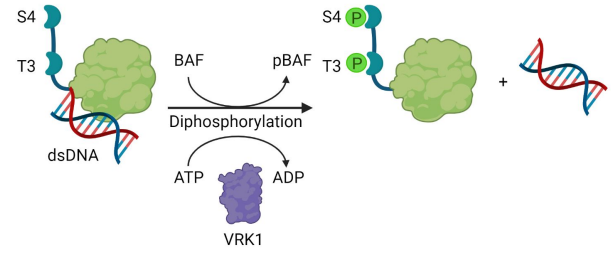


# Production of functional BAF - case study



- Soluble form of phosphorylated BAF was obtained by co-expressing with VRK1
- PhosphoBAF showed two phosphorylation states after 2 hrs incubation

## Partner

Internal case study project

## Background

VRK1 phosphorylates the N-terminus of BAF (Thr3,Ser4) and regulates its interaction with DNA  
 Expression of wild type dephosphorylated BAF in *E.coli* leads to the formation of inclusion bodies

## Aim

Produce functional BAF protein from *E. coli* by co-expression with VRK1

## Our Approach

BAF & VRK1 co-expressed → BAF purified by IMAC → dephosphorylated using lambda phosphatase followed by SEC → VRK1 catalyzed BAF phosphorylation confirmed by MS

## Value

- Production of difficult to express functional proteins using different expression strategies
- Project completion within 4 weeks including expression optimization