**Product Information**

**RescueVision™ Protein - Engineered arrestin protein for strong GPCR binding**

**Product Names:** bArr1-WT, bArr1-300, bArr1-500, bArr1-600, and bArr1-750

InterAx is a Swiss Biotech company currently spinning off the ETH Zurich and the Paul Scherrer Institute. InterAx develops and markets drug-screening packages for pharmaceutical industry, which allow selection of drug candidates, quantification of cellular responses and prediction of drug action in the fields of pharmacological rescue & functional selectivity.

**Product Description**

Over one third of all marketed drugs target G protein-coupled receptors (GPCRs). Mutations in GPCRs cause >30 different human diseases. GPCRs signal primarily via G proteins and arrestins. A similar activation mechanism is proposed for all four existing arrestins due to high sequence similarities. Visual arrestin was genetically engineered and combinations of single point mutations were selected in a multi-dimensional search including interaction strength with GPCRs, thermo-stability, and expression level. InterAx arrestins are designed to interact with GPCRs at customized interaction strength with thermo-stability and expression levels similar to wild type arrestin. As shown below, arrestin constructs bArr1-300, bArr1-500, bArr1-600, and bArr1-750 interact more than 3x, 5x, 6x and 7.5x stronger with the GPCR rhodopsin than wild type visual arrestin (bArr1-WT). InterAx arrestins are the in vitro solution to measure GPCR activity and phosphorylation. InterAx arrestins enable for universal screening of virtually any Gi, Gs, or Gq-coupled receptor.

**Key benefits**

- Novel in vitro solution for screening receptor activation & phosphorylation
- Universal screening system independent of Gi, Gs, or Gq-coupling
- Improved binding to destabilized GPCRs allows for functional quantification of receptor stabilization
- Selectable interaction strength
- Target receptor integrity maintained
- Ideal platform for difficult GPCR targets

**Activity Test**

Activity of InterAx arrestins has been tested in pull-downs with native rhodopsin.

**Suggested Applications**

Surface plasmon resonance measurements. Introduction of labels / tags for further applications upon request.

**Precautions and Disclaimer**

This product is for R&D use only and not approved for clinical diagnosis, drug use or therapeutic procedures, not for household or other uses.

**Storage and Stability**

Store at -80°C. Repeated freezing and thawing is not recommended. For extended storage, freeze in working aliquots.

**References**


**Contact information**

For further information, please do not hesitate to contact Dr. Martin Ostermaier directly. Requests are welcome.

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