

Cost-effective

Lanthanide Chelates



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K A I V O G E N

For the well-being of your assay

Lanthanide Chelates

Time-resolved fluorescence resonance energy-transfer (TR-FRET) is a widely used technology in screening of new drug targets and other applications. Kaivogen's Loisto615 europium chelate is a perfect choice for a donor label in TR-FRET based assays with good stability, low background and efficient energy-transfer.

Loisto615 europium chelate is compatible with typically used acceptors, like allophycocyanin and Alexa647[®]. As labels for heterogeneous assays, Kaivogen offers the Kajo chelate family. Kajo chelates offer excellent sensitivity and ease of use compared to traditional ELISA reagents.



During the signal generating intensification step of the assay, Kajo chelates release the bound lanthanide and form a new highly fluorescent complex.

Properties of Kajo and Loisto chelate families:

- Long fluorescence life-time
- Sharp emission peaks
- Large Stokes shift
- ITC –activation for labelling of amino groups
- Cost efficient pricing
- Delivered with a certificate of analysis

Alexa647 is a registered trademark of Life Technologies

Chelate Specifications

Kajo615

- Europium chelate for high-sensitivity applications
- Excitation 340 nm, emission 615 nm
- A separate intensification step needed
 - Europium fluorescence intensifier recommended
- For labelling of proteins and small molecules

Loisto615

- 7-dentate intrinsically fluorescent europium chelate
- Excitation 340 nm, emission 615 nm
- Excellent choice for TR-FRET based assays due to small 665 nm side peak and efficient energy-transfer capability
- For labelling of proteins and small molecules

Loisto545

- 9-dentate intrinsically fluorescent terbium chelate
- Excitation 340 nm, emission 545 nm
- Excellent choice for dual label assays based on direct surface measurement in combination with Loisto615 Ultimo
- For labelling of proteins, small molecules and oligonucleotides

Loisto615 Ultimo

- 9-dentate intrinsically fluorescent europium chelate
- Excitation 340 nm, emission 615 nm
- Excellent choice for direct surface measurements due to high molar absorptivity and luminescence yield
- Applicable also for nucleic acid hybridization assays
- For labelling of proteins, small molecules and oligonucleotides

Europium Fluorescence Intensifier

- Solution needed for fluorescence intensification of Kajo chelates
- Releases europium from Kajo chelates and forms a highly fluorescent complex
- Ready for measurement after 5 minutes incubation
- Intensified signal stable for several hours, if evaporation is prevented
- Cost-effective option to be used with chelates demanding intensification or enhancement step
- Shelf-life >12 months at RT or + 4 C°



C u s t o m S e r v i c e

Several other chelates with differing lanthanides, like europium, terbium, samarium or dysprosium, can be ordered from Kaivogen's custom service. Also other activation chemistries, like IAA for labelling of SH-groups, are available.

Kaivogen also has a labelling service capable of delivering labelled small molecules, like hormones and oligonucleotides. The labelled molecules are HPLC purified and delivered with a certificate of analysis.

C o n t a c t s

We are happy to answer any questions regarding our products.

To receive free sample for testing purposes, please contact:

info@kaivogen.com



K A I V O G E N

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