FIANOSTICS GmbH Technologie- und Forschungszentrum Telefon : +43 2622 27514 FluoBolt[™]-Noggin Info Viktor Kaplan Strasse 2 Objekt E, 2. OG 2700-Wiener Neustadt, Austria email: office@fianostics.at

About FluoBolt[™]-Technology:

For more information about FluoBolt™-Technology, please visit: www.fianostics.at/en/technology



The unique features of FluoBolt™-Technology enable us to develop direct fluorescence immunoassays with the following benefits:

About FluoBolt[™]-NOGGIN:

Noggin is a secreted homo-dimeric glycoprotein which predominantly binds to BMP-4 and BMP-2 and antagonizes their bioactivities by preventing binding to both type I and type II BMP receptors. Noggin is involved in the patho-physiology of:

- Ankylosing Spondylitis (Morbus Bechterew)
- Osteolytic Bone Metastases
- Pulmonary Arterial Hypertension

FluoBolt[™]-NOGGIN assay detects free circulating, not BMP-complexed human NOGGIN, which was shown inhibiting the signal of NOGGIN in human serum with recombinant BMPs (see chart on the right). For more information about the FluoBolt[™]-NOGGIN assay, please visit www.fianostics.at/en/products/<u>noggin</u> effect called "Metal Enhanced Fluorescence" which is generated by nanometal structures on the bottom of our micro plates. Those structures create a very strong local electromagnetic field ("localized surface plasmon"), that greatly enhances the fluorescence of surface bound fluorophores.

FluoBolt™-Technology is based on a physical

- High Sensitivity
- Single Step Procedure
- No Washing Steps
- No Enzym Subtrates required
- Long Term Stable Signals



Assay Characteristics

Method	Metal Enhanced Direct Sandwich Fluorescence Immunoassay in 96-well plate format
Sample type	Serum, Plasma
Standard range	0 to 250 pmol/l (6 standards and 2 controls in a human serum based matrix)
Conversion factor	1 pg/ml = 0.015 pmol/l (MW: 66 kD)
Sample volume	20 μl (undiluted sample) / well
Incubation steps / time / temperature	Single step assay, 4 h , 37°C or over night RT
Sensitivity	LOD (0 pmol/l + 3 SD): 1 pmol/l; LLOQ: 5 pmol/l
Specificity	This assay detects circulating human NOGGIN, that is not complexed with BMP-2, -4 or -7
Cross-reactivity	NOGGIN is highly conserved across species. Human NOGGIN shares 99%, 99%, 98%, 97% and 89% aa sequence identity with mouse, rat, bovine, equine and chicken NOGGIN. Cross reactivity of this assay with other species than human has not been tested.

Super Sensitive and Easy



FluoBolt⁻⁻Noggin

High Sensitivity, Single Step Immunoassay for free, bioactive Noggin in Serum and Plasma

Signal Enhanced Fluorescence Immunoassay based on Plasmonic Substrates

High Sensitivity
Single Step Assay
No Wash
No Enzyme Substrate
Stable Signal over Time

www.fianostics.at