

<b>Product Name</b>	IGFI RIA kit
<b>Catalog No</b>	55R-IGFR21
<b>Size</b>	200 tests
<b>Synonymns</b>	IGF1 RIA kit, Insulin-like Growth Factor 1 RIA kit
<b>Description</b>	RIA kit for the detection of IGFI in the research laboratory
<b>Background</b>	<p>Insulin-like growth factors (IGF) I and II play a pivotal role in regulating the proliferation, differentiation and specific functions of many cell types. IGFI is identical with Somatomedin C (SmC) and has a molecular weight of 7649 Da. Its major regulators are growth hormone (GH) and nutrition, although its production in specific tissues is affected by a multitude of tropic hormones and other peptide growth factors. In contrast to many other peptide hormones, IGFs are avidly bound to specific binding proteins (IGFBP). The seven classes of IGFBPs which are known at present either bind IGFI and IGFII with similar affinities or show a preference for IGFII.</p>
<b>Storage</b>	Store at 2-8 deg C
<b>Applications</b>	RIA
<b>Usage Recommendations</b>	Optimal conditions to be determined by end user
<b>Assay Information</b>	<p>In order to dissociate IGFI from the IGFBPs, the samples must be diluted in an acidic buffer. The diluted samples are then pipetted into the assay tubes. The IGFI antiserum containing an excess of IGFII is dissolved in a buffer, which is able to neutralize the acidic samples. After the IGFI antibody solution has neutralized the samples, the excess IGFII occupies the IGFbinding sites of the binding proteins, thus allowing the measurement of free IGFI. With this method, the IGFBPs are not removed, but their function and therefore their interference in the assay is neutralized. Due to the extremely low crossreactivity of the IGFI antibody with IGFII, excess IGFII does not disturb the interaction of the first antibody with IGFI or IGFI tracer. The assay is then continued like a conventional RIA using a second antibody for the separation of bound and free tracer. The colour of the solutions makes possible for every tube a control of the respective performance step. This enables you to check your pipette plan, if necessary. Dilution and acidification buffer (including the reconstituted standards and diluted samples too) are coloured in green by addition of a pH indicator dye. After addition of the uncoloured IGFI antibody solution, the now neutralized solutions turn blue. Finally, addition of the red coloured tracer solution turns the entire incubation colour violet.</p>