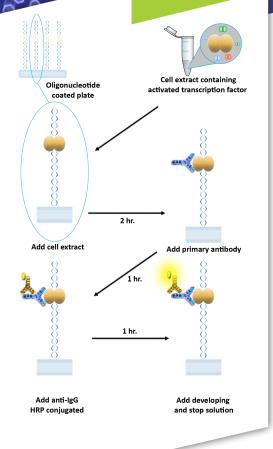
### RayBio® Transcription Factor Activity Assays

ELISA-based detection of transcription factor transactivity



# REPLACE YOUR GEL SHIFT ASSAYS!

how it works





RayBio®

are in vitro enzyme-linked immunosorbent assays for the semi-quantitative measurement of active transcription factors in nuclear extracts and cell lysates.

- Specific transcription factor-DNA binding assay
- Non-radioactive: perfect alternative to EMSA
- · Simple: colorimetric ELISA-based protocol
- Rapid: 5 hour processing time
- · High throughput: 96-well plate format

**How it works:** Double stranded oligonucleotides are coated onto a 96-well plate. The oligonucleotides specifically capture the target transcription factor contained in whole cell lysates or nuclear extracts after a short incubation. Subsequently, the primary antibody recognizes the target transcription factor-DNA complex in each well, and a HRP-conjugated secondary antibody is then used for detection. After washing away unbound antibody, signal is obtained with a colorimetric plate reader at 450 nm. The specificity of binding between the transcription factor and the DNA element can be further validated by control probes included in the kit: a specific competitive DNA probe and non-specific competitive DNA probe.



## **RayBio® Transcription Factor Activity Assays**

ELISA-based detection of transcription factor transactivity



representative data

nuclear fraction

TNF-α TNF-α TNF-α

cytoplasmic fraction

Absorbance (450 nm)

3.0

2.5

1.5 1.0

0.5

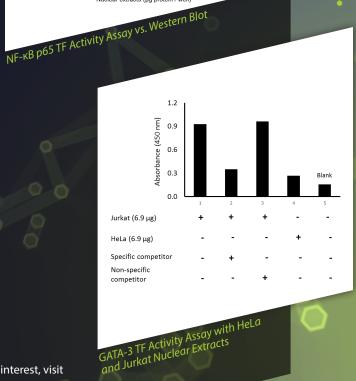
TNF-α TNF-α TNF-α

■ Hela + TNF-α 30

Nuclear extracts (µg protein / well)

#### TARGET NAME CAT. NO. Human NF-kB p50 TFEH-p50 Human NF-кВ p65 TFEH-p65 TFEH-pCREB Human pCREB TFEH-P53 Human p53 TFEH-SOX2 **Human SOX2 Human TFEB** TFEH-TFEB TFEH-FOSB Human fosB **TFEH-CFOS** Human c-Fos TFEH-NRF2 **Human NRF2** TFEH-cMyc Human c-Myc TFEH-OCT4 **Human OCT4** TFEH-HIF1a Human HIF-1α Human GATA-1 TFEH-GATA-1 TFEH-GATA-2 Human GATA-2 TFEH-GATA-3 Human GATA-3 TFEH-JUNB Human jun-B TFEH-JUND Human jun-D **Human NANOG TFEH-NANOG**

# ALSO AVAILABLE: RayBio® Nuclear Extraction Kit (Cat. No. NE-50). Using our simple protocol, isolate cytoplasmic and nuclear protein fractions from up to 50 cell or tissue samples. This kit is highly recommended for use with RayBio TF Activity Assays.



#### **KEEP LOOKING**

TFEH-NFYA

TFEH-FRA2

TFEH-MEF2

TFEM-NRF2

TFEH-SP1

To further explore cellular pathways related to your transcription factor of interest, visit our interactive pathway maps to find additional assay kits.

https://www.raybiotech.com/pathways-and-processes.html

Human NF-YA

Human FRA-2

**Human MEF2** 

Human SP-1

Mouse NRF2

